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# Two Perspectives on the Multilingual Condition - Linguistics meets Philosophy of Technology

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#### Abstract

Multilingualism as a (sub)-discipline of linguistics with special interest in language acquisition and didactics was established in the 1990s. As time moved on, the discipline of multilingualism evolved into an interdisciplinary field of research, but not yet including a philosophy of multilingualism. In this record of a conversation between linguist Britta Hufeisen and philosopher Alfred Nordmann, the concept of multilingualism is explored as well as its differences to monolingualism. This implies differences also between the philosophy of language and a philosophy of multilingualism. Upon closer scrutiny it becomes clear that multilingualism is not only about language acquisition anymore but about the ways in which individuals can make themselves understood and orient themselves in a multilingual environment which includes artificial languages. In this way, the notion of affordances comes to the fore as individuals are afforded by their environment the use different language skills in different situations. The same applies to technology: Technology always affords us to do something in a specific way, but at the same time, while using it, we discover other possible uses and thus assign new meanings to it. This is where the linguist and the philosophic view diverge: The former puts an emphasis on the use of language and the actual semantic meaning of words, whereas the latter analyzes language and technology primarily in terms of its use, therefore meaning becomes a product of use. Both stress, however, the importance of culture and context for meaning and use.

**Keywords:** Multilingualism; Affordances; Dominant language constellations; Translanguaging; Ludwig Wittgenstein; Larissa Aronin

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## Два взгляда на многоязычие — лингвистика встречается с философией техники

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#### Аннотация

Мультилингвизм как (под)дисциплина лингвистики с особым интересом к овладению языком и дидактике была признана в 1990-х годах. Со временем мультилингвизм превратился в междисциплинарную область исследований, но еще не включающую в себя философию мультилингвизма. В этой записи разговора между Бриттой Хуфайзен и Альфредом Нордманном исследуется концепция мультилингвизма и ее отличия от монолингвизма, а также различия между философией языка и философией мультилингвизма с лингвистической и философской точек зрения. При ближайшем рассмотрении становится ясно, что мультилингвизм — это не только овладение языком, но и то, как человек может сделать себя понятным и ориентироваться в мультилингвальной среде, которая включает в себя и искусственные языки. Таким образом, на первый план выходит понятие аффордансов, поскольку окружающая среда позволяет людям использовать разные языковые навыки в разных ситуациях. То же самое относится и к технологии: когда мы используем технику, она всегда позволяет нам делать с ней что-то определенным образом, но в то же время, используя ее, мы обнаруживаем другие возможные применения и, таким образом, придаем ей новое значение. Вот где взгляд лингвиста и философа расходятся: первый делает акцент на использовании языка и фактическом семантическом значении слов, тогда как второй анализирует язык и технологию прежде всего с точки зрения их использования, поэтому значение становится продуктом использования. Оба подчеркивают, тем не менее, важность культуры и контекста для значения и использования.

Ключевые слова: Мультилингвизм; Аффорданс; Доминирующие языковые созвездия; Транслингвизм; Людвиг Витгенштейн; Лариса Аронин

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### **INTRODUCTION**

Multilingualism came into its own as a field of research in the 1990s and has since grown into an academic community with its own journals and conferences. It is generally considered a sub-discipline of linguistics with close affinities to linguo-didactics and theories of language acquisition but in effect, it reaches far beyond these disciplinary boundaries: "multilingualism, as an academic subject, embraces not only fields connected with language, but also necessarily involves psychology, sociology, ethnology, ethnography, globalization studies, urban studies, material culture studies, and many more" (Aronin, 2017, p. 184).<sup>1</sup> As long as it is, this list does not yet include the philosophy of multilingualism which might provide a synoptic reflection of this interdisciplinary field.

In the same text, Aronin sets out a challenge: "In the same way that linguistics as a field of research is different from multilingualism, the philosophy of language and the philosophy of multilingualism diverge" (Aronin, 2017, p. 184). This challenge provoked a coffeehouse conversation between a linguist (Britta Hufeisen) and a philosopher (Alfred Nordmann), seeking to understand multilingualism as distinct from monolingualism, and to understand the philosophy of multilingualism as distinct from the philosophy of language. The following provides a synopsis of their exchange which identified several issues but did not aspire to provide a comprehensive review.

## WHAT IS MULTILINGUALISM?

From the point of view of linguistics, didactics, and theories of language acquisition, the meaning of multilingualism is that more than two languages are involved, separately or intermingling, either in a societal or in an individual context. A multilingual individual often grows up in a multilingual society, though multilingual families and individuals can also be found in a monolingual environment.

There are differences in competences when it comes to bilingualism and multilingualism. Primarily there is the number of languages in play. To be sure, many bilingualism researchers would say that there is not much difference whether two, three or six languages are involved. Multilingualism researchers, on the other hand, say the number of languages does indeed matter. If somebody grows up bilingually or starts learning a second language at school, that person has a completely different starting point than if someone starts learning a third, fourth or fifth language. Theoretical discussions about multilingualism, however, are not mainly concerned with communicative competence but with a change of attitude (and this has developed in Europe differently than in North America, see Bartelheimer et al., 2019). Twenty years ago, many would have said that if you learn a language or grow up with a language, you must aim to know it perfectly and to approximate as closely the ideal of speaking, reading, writing like a native speaker. The attitude of today's multilingualism is that one cannot be absolutely

<sup>&</sup>lt;sup>1</sup> Larissa Aronin is one of the main intellectual driving forces behind the study of multilingualism. She introduced a considerable number of fruitful and influential concepts which explains why she is frequently cited also in the following pages.



proficient in each and every one of your languages. Instead, we say it could be that in one language you are very good at reading texts. It could be that you do not have any problems understanding the language, but you do not speak it very fluently. For example, someone reads French texts well but never speaks French. That is why we differentiate between different language skills or levels of skill. So today's multilingualism is much more complex than and not as demanding as traditional bilingualism. It is simply unrealistic to become perfect in several languages at the same time.

Perfection here is this broad idea of communicative competence and takes C2 as its standard, that is, the highest level in the Common European Framework of Reference for Languages. One of the main drawbacks of traditional language acquisition research is the fact that the default is the idealized L1 native language speaker. This is highly unfair, not only because you have to have grown up in a certain environment in order to become an L1 speaker, but also because it implies also that every L1 speaker is perfect in every skill. This is not true. Someone who was born and raised in Germany is as German as one can be, and yet his or her writing skills might not be C2. Still nobody would ever question whether German is this person's L1, and so L1 does not refer to the ideal native speaker all the time (see for example Dewaele, 2018). In today's multilingualism research, we say, on the contrary, that you may very well have different skills, different competences in different domains and situations, and that is the innovative part of it. This is where concepts like Larissa Aronin's Dominant Language Constellations come into play (Aronin, 2006). This means that you not only have various competencies in various languages and different contexts of use, but also that you have a specific set of languages that you use on a regular basis. Your repertoire of languages might include further languages but many of them are dormant and are not used frequently. The idea of acknowledging and using your complete languages repertoire with a focus on your dominant language constellation is also embedded in the idea of a multilingual whole school curriculum (Hufeisen, 2018).

Philosophy does not as yet acknowledge multilingualism as a distinct topic. Interest in this question grows out of the discussions within studies of multilingualism, if only because it suggests a significant divergence from the philosophy of language which is also rooted in the ideal of the monolingual native speaker. The question is therefore, what would it mean even to have a philosophy of multilingualism? When philosophers of technology, in particular, hear about multilingualism and the new linguistic dispensation (Aronin & Singleton, 2008), the first thing that comes to their mind is not so much the competence of speaking or understanding one or three or more languages. In analogy to discussions of the technosphere, what comes to mind is the fact that we move about in a world in which we encounter on a daily basis many more languages than any individual could speak or understand. While most individuals claim for themselves to be monolingual or bilingual, they nevertheless manage to find their way in a multilingual environment. Without speaking the language, people go to China, go to Russia, and even within their own country they are confronted with a proliferation of languages. And these are not only the main natural languages, but include dialects and jargons, recorded words and codes that are implemented in vending machines, signage, device interfaces, or any technical sequence of signals.



## AFFORDANCES AND FUNCTIONAL MULTILINGUALISM

What does it take for an intelligent person to navigate in such a multilingual world? Even if one is quite illiterate when it comes to Chinese, one learns to recognize patterns such as names of subway stations which one cannot even enunciate, just by remembering the visual shape of a word. This would mean, then, that the departure of multilingualism from the native speaker ideal can be pushed to an extreme: In the multilingual condition, the shared competencies include those kinds of compensatory competencies which we might assign to illiterates who cannot read and write but have learned to disguise this fact by successfully acting as if they could. In this way, they somehow survive in society and can compensate for their apparent lack of competence. These abilities to compensate ignorance should now be treated as a linguistic competence in its own right, a competence required for successful navigation in a multilingual world.

On this account, affordances play a major role. The environment or our surroundings provide affordances that put one in the position of being able to act, as in the case of China. After some time one picks up certain signs or words and their function. The concept of "affordance" figures centrally also in Larissa Aronin's thinking about multilingualism (Aronin, 2017; Kordt, 2018). They are very useful because otherwise we would restrict our idea of learning too much to specific learning environments. But the specific environments with their classrooms and language labs are not our main source for learning. We learn from the affordances of the world around us. The second aspect brought out by multilingualism and the notion of affordances is that learners more or less pick what they need in certain situations: Being in China, for example, one tries to remember the signs for a specific subway station in order to remember when to get off. This is why affordances are said to be relational. This idea is further developed with the concept of functional multilingualism (Bradlaw et al., 2022a, 2022b). This enjoins us to concentrate mainly on the fact that whichever language you bring to the language table, you use whatever is useful for you in a specific situation, and that mixes very well with the affordance theory. In the beginning of a situation, one might need only German and English, but sitting in the train later on, one might need several other languages, at least rudiments of other languages.

To multilingualism researchers, the recognition of what is useful in a situation does not treat the notion of use and usefulness as fundamental - as in Wittgenstein's "meaning is use" (Wittgenstein, 1953, 43). What is central, instead, is what we call *Sprachenhandlungskompetenz* in German<sup>2</sup>: What have I learned about how I behave by way of speaking? This again fits very well with the concept of affordances because it is not so interesting for us what the property, essential feature, or definition of the lexical item "chair" is. The interesting thing is what it affords to me. What do I as a learner or speaker connect with the term "chair," what speech acts can I perform with that term? This owes to a shift in research perspective: We do not start off with the things themselves but with the learners, and this is why the relational notion of affordance is so important.

<sup>&</sup>lt;sup>2</sup> Sprachkompetenz is akin to proficiency or command of a language. Sprachhandlungskompetenz would be the competency to perform speech-acts in a language. Sprachenhandlungskompetenz is a multilingual concept and refers to the competency to act with and through different languages in different situations.



The two of us might look at the same object, but our interpretations are completely different because it is not the thing itself, but what the objects allows us to do and how we attribute this to the object.

Take the definition of a chair for instance and its affordance of "sittability." The semantic description of it might always imply that is has four legs. Now, the farmer's strapped-on stool for milking cows has one leg only. It also invites you to sit on it but in what sense is this a chair with just one leg? We therefore shift the perspective to *Sprachenhandlungskompetenz*, especially in semantics and pragmatics. You can try to describe the different meanings of love, and still, it means completely different things and is taken up differently by various individuals. This change of perspective by looking not at a standardized lexicon entry but at the individual lexicon of a person – especially if somebody has a multilingual lexicon – is highly interesting because you can see how the individual balances the different meanings of *chair*, *Stuhl*, or *chaise*. There you will notice that the scope of interpretations by individuals is much broader than what you would find, for example, in a dictionary.

The notion of affordance can serve as a hinge concept between the perspectives of linguistics and philosophy because here is a concept with a long tradition and practical significance for technology developers, in particular. It started in the fields of perceptual or *Gestalt* psychology and ecological psychology. It is implicit in the notion of human and other animals that they have relational interactions with their environment. From the beginning, it was very clear it describes somehow an objective kind of structure and relationship. James J. Gibson (1979) considered things like a chair which offer the sitting ability, for instance, and it was only a small step from there to move to design theory. This step was taken by Donald Norman (1988): He spoke about design as mostly concerned with affordances and the creation of ways to engage with things - as inscribed in the original meaning of the German word Aufforderungscharakter [the character of a thing to prompt, invite, or summon] (Wertheimer, 1912). Natural and designed things invite us to handle them in a certain way: A ball lying around, for instance, invites us to kick it somewhere. The notion that things invite us to do things and take them up as a resource or in a functional way informs the theory and practice of design. It guides the construction of user-friendly interfaces for intuitive handling. Here, product designers would say that they need to guide or steer users to push this button or that button because there is an objective story behind the requirements for an interface between humans and their environment. This way of talking signals quite a shift from classical thinking in that "affordance" replaces the old concept of "property." Classically, we think of objects in terms of their properties: Here is the essence of the thing, and there are its attributes which inhere or belong to the thing. We define things by way of its qualities. With affordances, on the other hand, we arrive at a relational notion of properties, so to speak, which exist only between a thing and some human or animal user, such as chair's "sittability." If the nature of things is eternally set by its essential properties, affordances can change since we can discover new affordances in new contexts of use: the chair is not only sittable but also climbable when used as a ladder. This brings us back to the linguists and the philosophy of language as opposed to a philosophy of multilingualism. From the point of view of philosophy, we held on for many years to the idea that we should think about



language in a monolingual, at best a bilingual mode. There has to be a meaning behind every sentence or word or speech-act, and we need to understand these meanings which are like properties that adhere to the words and anything composed from words: The word has a certain property which might be its lexical definition or something like that, we have to understand and preserve this property as we pass it on in a communicative act. Now we speak not only about "meaning is use" but about knowing how to appropriate and employ a sequence of sounds or signs situationally: Words and sentences are things to be handled and negotiated for purposes of orientation in the world and co-ordination with other people. They are no longer considered as carriers or vessels of meaning which is somehow invested in them, lurking behind them. Interestingly, alongside this multilingualist recognition came a breakthrough in digital speech recognition and translation. Instead of programming ontologies and teaching computers syntax and semantics, present-day algorithms learn about the occurrences and statistical distributions of thing-like spoken or written utterances.

#### TRANSLANGUAGING, DOMINANT LANGUAGE CONSTELLATIONS

Philosophy and sociology of technology are interested in stories about how technical objects can be retrofitted or re-appropriated for different purposes. The smartphone, for example, can be used for doing karaoke in public places. The smartphone was not originally designed for it, but affords karaoke nonetheless. The discovery of this affordance goes along with assigning new meaning and coming together in different ways. The smartphone is not just a communication and information tool but a device that helps us sing together and be merry. These kinds of shifts happen all the time and this corresponds to an extension of the ways in which users can express their interests and desires through technology. New technologies and the discovery of new affordances of old technologies thus expand our lexical repertoire, or maybe mental lexicon. This expansion creates opportunities and difficulties to orient ourselves and know our way about among the many languages, symbols, and codes that contribute to our multilingual condition. If multilingual competencies include the ability to navigate an environment that is saturated with signs and symbols from many sources in many shapes and forms, one thereby navigates also around Wittgenstein's ,,beetle in the box" (Wittgenstein, 1953, 293): Where a traditional or intuitive philosophy of language thinks of words or expressions as having a meaning, and of concepts referring in some sense to definitions, ideas, mental entities, multilingualism asks whether we really need these or whether these might as well drop out of the picture? If meaning, speaker's intention, or content are like beetles in boxes labelled "beetle," and if everyone carries such beetles around with them but no one can look inside anyone else's box, the beetles themselves don't actually enter the conversation as we show each other our boxes and agree that we all have beetles. The question of meaning or mental aspects of language drops out of the picture when we coordinate ourselves with one another through our linguistic performances.

From the point of view of linguistics, our beetle in the box is not our personal definitional thing. The very fact that we can talk to each other is a perfect source for misunderstanding, and this is why we need this negotiation of meaning because if we all



knew what we meant by XYZ we would not misunderstand each other. Here again the multilingual aspect comes into play. Through the learning of more languages, one's mental lexicon expands with each and every mental entry. Those are linked to certain lexical items in various languages, but one still has to negotiate with speakers of this language or other people in general. What do I mean when I refer to a chair? This is a stupid example, of course, but we still need this idea of negotiation of meaning, which is an old concept in linguistics, which you certainly have as well, because otherwise we just think we communicate with each other or we just think we understand each other, but in fact we do not.

There are new concepts of this idea of negotiation of meaning which are, if you not new at all. In the end, it all comes look closely, down to Sprachenhandlungskompetenz. Take, for example, migrant communities. If you sit in the tram and listen to people, you might hear "blah, blah, blah tram blah, blah, blah." This code switching, for instance — which was something absolutely forbidden in the 1970s because it was seen as a bad mixing of languages — has now become a communicative tool. This new concept or tool is called translanguaging. That means you systematically try to refer to various languages in your repertoire in order to make yourself understood as precisely as possible. The positive acknowledgment of it is something that is completely new because for a long time it was linked to the idea of bad interferences. It was this horror notion that the use of some phrase in another language ruins your own language, but now we say that there is so much more to it. Translanguaging and code mixing and code meshing, they can all contribute to the fact that we can talk to each other. So there has been a kind of a paradigms shift in multilingualism research in comparison to monolingual linguistics. In the beginning, bilingualism research was more or less all about those poor kids who grow up bilingually and who cannot speak any of their languages perfectly. The attitude towards people growing up multilingually has changed completely because we allow the languages to mingle and mix and allow individuals to use their languages as needed.

Society has become more liberal in this regard, and this is an attitude which researchers of multilingualism have been trying to match. In a way, multilingualism researchers were the first ones to listen to what is actually happening in society: The languages mingle and mix. In Germany, we once in a while complain about all those anglicisms in German. Some people hate this language mixing and others maintain that this is an enrichment of the German language and society. You can say that this kind of mixing is like the process of becoming multilingual. There is a change, and the linguists dealing with multilingualism were the first ones who listened and recognized that code mixing is happening already, and we should change our research focus and behavior in order to discover and appreciate what is out there. It certainly should not become normative, because this is not the task of researchers. Their task is to describe what is happening, when, for instance, a child grows up multilingually.

Philosophers are prone to wonder, however, about the historical periodization: what is new about the "new linguistic dispensation" as Aronin calls it (Aronin and Singleton, 2008)? No matter how we date it precisely, what is new is not the fact of many languages being spoken, but how they bump up against each other, how they intermingle. In the old



paradigm perhaps one would say, "I speak English, I speak French, I speak Latin, and then I speak German." The goal was then to master each of those languages, seeking perhaps to become perfectly eloquent in each. Since the languages were set off and separated from one another, one has to cross a border as one moves from one to the other, carrying packages of meaning from German to English, trying carefully to preserve it along the way. And there is always the skeptical question regarding the very possibility and quality of translation. Under the new linguistic dispensation characterized by translanguaging, we are talking about people who inhabit and are part of many different settings in which different languages are dominant. With people moving between these settings, there are shifts within their dominant language constellations (Aronin, 2006). And the question of translation does not really arise so often. People just move from one sphere to the next, you are speaking to your mother in your native tongue and speak to your boss in the local tongue of your profession, and in a shop you often use a regional idiom and usually you do not even hesitate to move between all those spheres. This is, perhaps, a more fluent way of using language even than a certain ease of translation. This makes it really interesting to see how technical jargons, certain kinds of local idioms, or even just being engrossed in some kind of apparatus and how it works, seamlessly moving between situations with different linguistic requirements. To use a technological analogue, this is like moving from a train station to a restaurant, to a dance club, to a hospital - where each setting has its own language or constellation of languages. One could be a bit provocative by saying that one of the affordances of the multilingual condition might be that when you go to a restaurant in China, you can order something without speaking the language. You are, then, extremely happy that the 'language' of the menu consists just of pictures. As one points at the pictures, one is doing something very crude, not at all learned. At the same time, it belongs to a highly sophisticated skill of navigating a multilingual world by way of compensation. We get along and understand each other even where a real linguistic competence, strictly speaking, is missing. Do we, then, even need the linguistic factor?

A linguist will look at this situation a bit differently, and will not say that pointing at pictures in the menu compensates an absence of linguistic competence. One would say that even being able to interpret pictures is part of language as well, since a picture can mean various things. This is again a matter of affordances. If you have a look at the menu, and you can interpret those pictures, those photographs tell you: "Well, this looks as if I would like to eat that." This is different from somebody opening the menu, saying: "What's that?" In and of themselves, photographs do not provide one affordance or another - this happens only when a person links it to the idea of what do I want to eat, so pictures can definitely be part of the linguistic repertoire for people.

#### **CONCLUSION**

Philosophers of technology are interested in this way of looking at language, because languages are tools that we use, resources that we employ, helping us orient ourselves in the world or coordinate ourselves with other people. All technology does this. Instruments, technological systems or infrastructures, and the devices we share also



coordinate our actions and socialize us in a certain way: We became Europeans through certain kinds of European technology, as some historians have shown, and we became Europeans because technological habituated us in certain similar ways (Hård & Oldenziel, 2013; Figes, 2019). We should just look at the design of toilets or the like, and we can see how certain forms of technology attune us to one another, produce a shared rhythm of life. And this is what the sharing in a stock of natural and technical languages affords as well. Even though one should not say technology and language are the same, they become strikingly similar when it comes to the ways in which we use them: We use science, technology, and linguistic gestures to navigate the social and natural world.

At the same time, linguists keep in mind and remind us that the examples of technology shaping us are very specific of culture, just like language. For instance, we have some notion of toilets. If you come to a house in another culture and find that it does not have a porcelain bowl but a hole in the ground, you might think that this house has not been finished yet, but in the end it merely inhabits a different technology. The cup, for instance, is a thing that we always associate with a handle. And if you see a picture of something that looks like a cup but has no handle, you might think of it as something else, but there are cultures that have cups without handles, Turkey for example. Without handles, these vessels are used as cups and not as glasses or mugs. The same applies to technology and technical science and technical languages because they are highly specific to their own engineering cultures and scientific traditions. So, from another point of view linguistic researchers of multilingualism arrive at the same conclusion: Technology is not so different, it is culture-specific – just like language.

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