

RESISTING THE SEARCH FOR AN ELUSIVE LINGUISTIC
PURITY IN LANGUAGE DESCRIPTION:
A CASE STUDY OF ÈDÓ AND MOBA COLOR TERMS

by

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Resisting the Search for an Elusive Linguistic Purity in Language Description: A Case Study of Èdó and Moba Color Terms

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ABSTRACT

This paper critically examines the elusive concept of a pure linguistic form and how attempts to discover and analyze such a form have come to underscore many of the contentious and problematic areas within language description research. I argue that this pure form of a language is an imagined, idealistic form exclusive of sociocultural interactions and influences that leads us to incomplete and misleading interpretations of language data. I first discuss the ways in which a search for purity has manifested itself in multiple domains of linguistic research, from language revitalization projects seeking to reinvigorate an “ancestral code” (Woodbury 2005), to documentary linguists calling for inclusive ways to document variation (Meyerhoff 2017), and universalists filtering color term data to their simplest cross-linguistic commonalities (Berlin & Kay 1991).

After describing the pervasiveness of linguistic purity throughout multiple research domains, I turn to two specific cases of my own color term research to show what can be gained from an analysis that rejects the notion of a pure form and instead embraces the social, cultural, and historical influences on the language as part of the language itself. Examining color terms from both Èdó, a Volta-Niger language spoken in Nigeria, and Moba, a Gur language spoken in Togo, I show how an adherence to pure forms produces a lacking portrayal of the language and its speakers in comparison to the type of holistic description I encourage. I show that, while a reduction and seeming purification of language data can be immensely helpful in discovering

universals, these methods are often applied to individual languages resulting in descriptions that fail to account for the history and culture of the language community.

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Introduction

The field of language documentation and description is tasked with the broad and daunting goal of compiling and describing in great linguistic detail the forms and functions present within a given language. In the words of Himmelmann (2006: 1), language documentation is “a field of linguistic inquiry and practice in its own right which is primarily concerned with the compilation and preservation of linguistic primary data” ultimately culminating in “a lasting, multipurpose record of a language.” The vagueness of this definition and its potential for various interpretations is not lost on Himmelmann — he devotes the majority of his chapter to unpacking the meaning of “a lasting, multipurpose record” and how that meaning may differ from researcher to researcher. The vast scope of language documentation and description provides ample space for great variation in preferred methods of data collection and analysis, as well as to what ends the data should be analyzed. How much data is enough in a discipline with “no principled upper limit” (3) for what can and should be included in the analysis?

While Himmelmann suggests the scope of the documentation project be limited in ways specific to that project’s research goals, this leaves open to interpretation the question of exactly how deep a researcher must dive to adequately explain the phenomena they study. Grenoble (2010) echoes this concern in her exploration of the practices and values of language documentation, acknowledging an “over-arching difficulty of the ever-receding goal of assembling a complete taxonomy of all possible linguistic phenomena” (5). She argues, for example, that paralinguistic features, such as hand gestures and sign languages, are rarely included in language descriptions regardless of the indisputable impact they have on social and linguistic interactions. Like Himmelmann, Grenoble concludes that the current assumption of the field holds that documentation researchers will determine what linguistic features are relevant to

the goals of their project and include them accordingly, providing a diverse range of data requirements between documentation teams and between individual projects (2010: 5). Again, we find strict guidelines for the practice of language documentation and description to be contradicted by the very definition of the field. However, as we will explore in greater detail throughout this paper, that is not to say the field should not function under a principle of including sufficient data for the claims one makes, but rather that a single principle such as this is increasingly difficult to define.

Discrepancies in conceptions of what language documentation truly is and what it is meant to achieve are divided even further along the lines of the responsibility of the researcher with regards to what they do with the language data once they have collected it. Is language documentation simply responsible for capturing primary data in the form of recordings and making that data available for further studies among various disciplines, or are language documentation teams meant to make theoretical pursuits of their own? Grenoble acknowledges that language documentation as a practice “can be conceptualized as essentially atheoretic” (2010: 5) but that it carries inherently theoretical aspects at least with regards to what data it archives and how. Although language documentation is often intended as a basis on which to “strengthen the empirical foundations of those branches of linguistics and related disciplines which rely heavily on the data of little-known speech communities” (Gippert et al 2006: 1), that is not to say it is void of its own theoretical assumptions. The lines drawn between disciplines are muddled ones, as reality does not divide itself cleanly between categories within which it can be easily digested and understood. To present a corpus of data is to provoke inevitable evaluations of that data, as it is human nature to categorize and interpret, and therefore we find dangerous implications in assuming that language documentation is a “theory-free or anti-theoretical

enterprise” (2006: 4). In her own critique of language documentation methodologies, Hill (Gippert et al 2006) argues that documentation cannot exist without a certain community involvement and that therefore “we must incorporate a cultural and ethnographic understanding of language into the very foundations of our research” (113). We cannot extract language from a culture any more than we can extract their cuisine, their clothing, or their religious customs. It is all these things combined, and indeed much more, that establish our very concept of culture.

The insistence of language documentation and description as inherently theoretical and inextricably tied to the culture of those who speak the language in question is central to my following discussion of the field. To date, language documentation has seen a divide between two general methodological approaches to the field. The first is an anti-theoretical approach seeking to describe an elusive, neat, and *pure* form of the language isolated from social influence so that other disciplines may apply theories to the data. The second is a more culturally-sensitive approach which acknowledges the inevitability of social influence on the structures of a language and seeks to describe the language in terms of the culture it is part and parcel to. We know language to be a constantly adapting social and interactive phenomenon, and as such we cannot reasonably separate a language from its community of speakers and their ways of life.

In the following sections, I explore the ways in which a futile search for the pure form of a language has manifested itself in the greater concerns of the field of language documentation before discussing how the field can benefit from favoring a more culturally sensitive approach inclusive of social influence. I first examine potential references and critiques of linguistic purity in previous research. I then discuss how the notion of purity pervades two modern debates within language description: the debate of properly documenting linguistic variation and the debate of relativist versus universalist approaches to language description. I investigate the ways in which

both debates are underscored by differing opinions on the value and acceptability of a pure linguistic form. Finally, using two languages of Africa on which I have conducted documentary fieldwork, I then analyze documentary methods used in the hotly debated domain of color term description to show how culturally sensitive approaches to documentary research can provide a more complete and accurate representation of the language than those seeking a pure form.

Contemporary Critiques of Linguistic Purity

Perhaps one of the closest explanations of the notion of a pure form sought by traditional documentarians to the one I present here is what Woodbury (Woodbury 2005; Austin & Sallabank 2011) coins the “ancestral code.” Woodbury describes this ancestral code as an early form of the language perceived to be uninhibited by language contact and other influences outside of the original community of speakers. While ancestral codes may be interpreted as “stable, persistent, emblems of the community identity,” contemporary variations of the language are seen simply as “transient phenomena” (1) not accurately representative of the language (or, perhaps, not accurately representative of the *pure* form of the language). Documentary research, especially that with the goal of revitalizing the language in question, often focuses on an attempt to describe this idyllic ancestral code rather than describing the way the language is truly used in current practice. In fact, Woodbury found that even within the context of language revitalization projects, the currently spoken variant of the language, along with all its social influences, is more accurately representative of the culture of those who speak it and therefore more effective in prolonging their culture. He cites in his work a revitalization project by Diana Eades in 1988 who worked to revitalize the language of Aboriginal communities in Queensland, Australia. While general perceptions of the Aboriginal language were that a pure, ancestral code had once existed and then had deteriorated through years of contact with English, Eades actually discovered quite the opposite. For example, she explains that “the Aboriginal priority on developing, maintaining, and strengthening social relationships is both reflected in, and created by, the way people speak to each other, whether the language variety is English, Aboriginal English, or Lingo (Eades 1988:101 via Austin & Sallabank 2011). The finding was, therefore, that instead of there existing a perfectly pure and unadulterated ancestral code that had been

altered in ways inconsistent with the culture of those who speak it, those alterations were in fact themselves reflective of the culture of the speakers. Rather than English influences widening the gap between their culture and their language, Aboriginal speakers incorporated English in ways that further emphasized their own ways of life. Indeed, it is now a description of the ancestral code that would prove insufficient in explaining the language of the Aboriginal community, as it would fail to include years of language contact and cultural interaction that have shaped their culture.

This realization can be alarming in some respects, as it inherently increases the difficulty of accomplishing meaningful work in an already dauntingly broad field. Childs et al (2014) warn this may be a threat to the field, asserting that “language documentation’s emphasis on fully capturing the world’s linguistic diversity will fall short of its potential” (2) if we are unable to address social influences on the languages we describe. They suggest the introduction of a new subfield, which they dub “sociolinguistic documentation,” in which we document “not only lexico-grammatical codes but also the sociolinguistic contexts in which those codes are used” (2). The concept of “sociolinguistic documentation” parallels the culturally sensitive documentation research I encourage, though the introduction of an entirely new subfield may be unnecessary if the existing one can continue to move in the right direction. To accurately describe a language as it relates to the current state of its speech community, we must embrace the influences that make the language what it is today rather than seeking an ideal form of what it may have once been. Rather than stripping away and extracting our data, we must embrace the messiness of living language data and analyze it as it comes to us, unfiltered and difficult.

Purity in Documenting Variation

One area of methodological concern in language documentation in which pursuits of a *pure* language hold strong influence is that of linguistic variation. While the very notion of documenting variation within linguistic structures is contrary to the concept of a single pure form of the language, it is perhaps this very opposition that has led a number of researchers to call for an inclusion of variation in documentation projects. Resisting the potential for superficial and incomplete language descriptions, Meyerhoff (2017: 526) calls for an interdisciplinary “productive alliance” between the subfields of language documentation and sociolinguistics to account for the issue of variation. She explains that, “recognizing that variation... is both unavoidable in language documentation and central to the systematic study of sociolinguistics... an increasing number of linguists are exploring the intersections between the two” (526). Again, much like Eades had suggested with her work on the Aboriginal people of Queensland, Australia, we see a need for including aspects of social influence within our language descriptions. Without a social context within which to understand the implications of language documentation data, we are left only with “data graveyards,” or “large heaps of data with little or no use to anyone” (Gippert et al 2006: 4). However, combining the two subdisciplines of sociolinguistics and language documentation “layers observations across many levels of linguistic structure and highlights the links between sometimes unexpectedly connected components of the grammar” (Meyerhoff 2017: 545). When we work in a combined realm of sociolinguistics and documentation, we can discover phenomena we never would have found within one single discipline.

Individual cases of language descriptions tackling variation provide even further insight into the benefit of interdisciplinary approaches that shrug the notion of a single, pure linguistic

form. The 2016 work of Marten and Petzell on the Kagulu ethnic community language of Tanzania provides a clear call for the inclusion of language variation in documentary linguistics. Their research found that Kagulu occurs in two forms — ‘pure’ and ‘mixed’ Kagulu. While the ‘pure’ form is reminiscent of the elusive pure forms we have discussed thus far, the ‘mixed’ Kagulu exhibits strong influence from language contact with the national language Swahili, both lexically and grammatically, and varies primarily depending on the age of the speaker (Marten & Petzell 2016: 119). After extensive fieldwork with Kagulu speakers, Marten and Petzell determined that a description of the language ignoring this prominent variation among speakers would be misleading and utterly incomplete. They found that “all versions of the text are valid in their own right, and that they are ‘authentic’ representations of different linguistic usage” (119) rather than the ‘mixed’ Kagulu being considered a misuse of the language, as one might believe if they were searching for Woodbury’s ancestral code or our elusive and misleading concept of the pure language. Had Marten and Petzell approached Kagulu with *a priori* assumptions about the existence of a pure form that needed extracting, we would have been left unaware of the influences of the Swahili language or the social dynamic present between ‘pure’ Kagulu users and ‘mixed’ Kagulu users.

Within the domain of language documentation for the purposes of revitalization, another case for documenting variation arrives in the 2017 work Skilton completed on the endangered Amazonian language Máihiki. Among the speakers Skilton worked with, she found a great amount of dialectal variation primarily dependent on the “life histories and kin relations of speakers” (98). Their speech varied phonologically and morphologically so much so that Skilton concluded the documentation of that variation was “necessary for the materials to accurately represent the internal diversity of the language” (94). Her work with Máihiki speakers served to

enlighten Skilton to the ways in which variation may arise and the importance of that variation to truly understanding the language as it relates to those who speak it. She reports a number of ways language documentation can include sociolinguistic elements of variation and also a few key pitfalls to avoid — one being the tendency to work primarily with “good speakers” (112) of the language. Here we may interpret “good speakers” as those who speak a variety of the language most consistent with a pure form or Woodbury’s ancestral code. In the case of Máihiki, the “good speakers” would have been speaking only one variety of the language. Had Skilton worked exclusively with those speakers, the entire phenomenon of sociolinguistic variation within Máihiki would have gone undiscovered and our interpretation of their language and its functions would be wholly misled. A speaker of a different variety of Máihiki, accomplishing significant social work through the use of that variety, would simply be brushed off as an incompetent speaker of the *pure* Máihiki traditional language documentation might seek to describe.

While perhaps unfortunate for the field, it is no grand surprise why language documentation has thus far been lacking in areas such as variation. Both Skilton (2017) and Meyerhoff (2017) point to an issue in the proper training of researchers, specifically with regards to a lack of interdisciplinarity. Skilton encourages “language documentation in concert with methods of variationist sociolinguistics” (112) but emphasizes an inability for that research to be properly carried out when it is “unusual for students to be trained in both cross-linguistic descriptive fieldwork and sociolinguistics” (95). Meyerhoff parallels these concerns, noting that language documentation is generally “undertaken by someone who lacks the detailed linguistic and ethnographic knowledge” (528) necessary to account for the complexities they may encounter with regards to phenomena such as sociolinguistic variation. The hindrances of such

holistic language description may be clear, but the solution is not. While Childs et al (2014) suggest establishing an entirely new subfield of “sociolinguistic documentation,” Skilton and Meyerhoff seem to suggest an adjustment and increase in interdisciplinary training among language documentation teams.

Regardless of which avenue is taken to ameliorate the shortcomings of traditional language documentation, there is a clear call among the research community that some course of action need be taken to make it more inclusive of the complex data we often encounter. Rather than enforce an idyllic, homogenous, pure form of a language, documentation efforts must embrace the inevitable heterogeneity of language data much like we find in Migge and Léglise’s 2012 study of variation in the Takitaki language of French Guiana. Their research uncovered an extensive amount of variety among the forms and functions of Takitaki dependent upon foreigner status, urban registers, and interaction across sociocultural groups (310). Rather than reducing their data to a single, pure form of the language and conforming the variation to one standard variety, Migge and Léglise produced an in-depth discussion of exactly what variation occurred, when it occurred, and what social work it served to accomplish. Their descriptions of each variety and the social implications of those varieties were collected hand-in-hand, as one and the same, leading to fascinating discoveries of the multitude of ways Takitaki can be used and the realization that “rather than erasing this heterogeneity or treating it as problematic... language documentation should fully embrace it both in terms of its research and in terms of the written products that emerge from this research” (330).

Linguistic variation has proven to be untenable when analyzed through a purist approach, as the very nature of variation negates the possibility of a single, ideal form. It is the variation itself that provides intrigue rather than an elusive pure structure that must be extracted from a

muddled and complex set of data. In a proper and complete description of a language and its variants, this very complexity is what makes the research worthwhile. The very desire expressed by these researchers (Skilton 2017; Meyerhoff 2017; Marten & Petzell 2016; Migge & Léglise 2012) for a better method of describing linguistic variation is itself a rejection of the notion of linguistic purity. However, despite these rejections, the pursuit of linguistic purity remains prevalent in other contentious domains of language description as well.

Purity in the Relativism vs. Universalism Debate

Another area of language description that is strongly rooted in disputes over linguistic purity, aside from that of variation, is the ongoing debate between relativism and universalism — perhaps one of the most contentious among linguists. While the relativist emphasizes the interplay between the language one speaks and the way they live their lives, the universalist seeks specifically those forms of the language which have been simplified to their universal commonalities shared among multiple languages. As such, the notion of pursuing a pure form of a language in documentary contexts generally aligns itself with the universalist, while the culturally sensitive and holistic approach I encourage here tends to align with the relativist. I explore throughout the following sections the ways in which a search for linguistic universals often mirrors a search for linguistic purity, and how that search for purity falls short of a complete description of any one language in a way that relativism solves with its inclusion of social influence.

The concept of linguistic relativity is commonly associated with the Sapir-Whorf Hypothesis, a term applied retroactively to the writings and claims of Benjamin Lee Whorf concerning the influence of language on thought and behavior. Whorf (2012), originally working for a fire insurance company, took an interest in the way a change in the wording of workplace warnings could effectively change one's behavior. Employees would behave differently around “empty gasoline drums” than they would around “gasoline drums,” perhaps lighting a cigarette when they would otherwise refrain even though an empty gasoline drum can be just as dangerous due to the vapors it contains (173). Realizing it was the *language* and not *reality* that dictated the behavior of the employees, Whorf pursued the causal link between language, thought, and behavior. He would later apply these methods to his description of the Hopi language of Arizona,

ultimately finding that “the grammar of Hopi bore a relation to Hopi culture, and the grammar of European tongues to our own ‘Western’ or ‘European’ culture” (178). Further exploring this relationship between language and cultural practices, Whorf ultimately concluded that “concepts of ‘time’ and ‘matter’ are not given in substantially the same form by experience to all men but depend upon the nature of the language or languages through the use of which they have been developed” (202). He essentially stated that, if strictly interpreted, language determines thought and, if loosely interpreted, that language influences thought. This concept later embodied the concept of linguistic relativity and sparked a continuing debate between its proponents and those who favored universalist ideals, preferring the view that all humans share universal commonalities in cognition and then smaller variations occur within the context of those greater universals. While the relativist invokes the inextricable relationship between one’s language and their individual lived experience, the universalist seeks to reduce variation to the lowest common denominator among all languages. While both have their merits and work toward different ends, I explore in my later discussion of color terms the risks of embracing a universalist pursuit of purity in language description. As we see in the case of variation linguistics, stripping language data down to a point of convenience, whether that be to find an ideal form for revitalization efforts or to find linguistic universals, entails ignoring crucial parts of the language as they pertain to the culture of the speakers. However, this is not to say that universalism is not still strongly supported by a number of researchers.

Debates between relativists and universalists, inevitably also debates between those inclusive of social influence and those searching for purity, are very much alive and well in modern research. Across the many domains and subfields of linguistics, researchers continue to debate influences and evidence of relativism and universalism within the scope of their studies.

Currently, there appears to be equal representation on either side, with a criticism of one appearing just as often as a promotion of the other. Some, such as Bylund and Athanasopoulos (2017), reach conclusions affirming Whorf's theories of relativity. Their research sought to test the relativity of the human concept of *time passage*, a concept universalists hold to be the same across all humans and one that Whorf specifically asserted to be conditioned by language in his description of the Hopi community.

However, Bylund and Athanasopoulos looked specifically at the contrast in conceptions of time between native Spanish speakers and native Swedish speakers. Knowing Spanish describes time duration as “big” or “small” and Swedish describes time duration as “long” or “short,” they provided stimuli varying in length over time as well as stimuli varying in size over time (911). Through strategically misleading participants, they found that Spanish speakers' conception of time was misled via changes in size whereas Swedish speakers were misled via changes in length, indicating that “language, under certain circumstances, can transform the basic psychophysical experience of the passing of time” (915) and therefore reaffirms the theory of relativity. However, equal work has been accomplished in the realm of universalism with findings contrary to those affirming relativity. In 2002, Papafragou et al studied native English and Greek speakers and their perceptions of motion. They note that linguistically, English encodes manner of motion within the verb and direction of motion via modifiers while Greek does the opposite, encoding direction within the verb and manner via modifiers (Papafragou et al 2002). However, despite these linguistic differences, both Greek and English speakers performed identically in nonlinguistic tasks involving remembering and categorizing motion events, which Papafragou et al attribute to “a good measure of independence between conceptual and linguistic representation” (2002: 216). Their work suggests that certain concepts of motion are universal

despite being represented in different ways linguistically. Contemporary works in other linguistic domains reinforced universalist ideals as well. For example, Fleming and Slotta (2018: 394) studied the pragmatic use of kinship terms among 80 language communities and found “striking regularity across different languages and cultures” with regards to who used what terms. They found that, effectively universally, “juniors are enjoined to use kin terms and not personal names to address their senior kin while senior kin use personal names to address their juniors” (394). The widespread similarity in usage of kin terms and personal names for kin seemed to support evidence of universals, much like the earlier study by Papafragou et al.

Purity in Color Term Description

Despite the prevalence of relativist and universalist debates across various linguistic domains, it is perhaps nowhere as alive and vibrant as it is within discussions of color terms. Rarely does a discussion of methodologies and findings within color term description fail to refer to the seminal 1969 work of Berlin and Kay, *Basic Color Terms: Their Universality and Evolution*, later revised in 1991. Their original work analyzed color term data from native speakers of twenty languages of unrelated language families, using color chips to narrow color terms in each of the languages down to a set of “basic color categories” within the eleven potential categories, which include *white, black, red, green, yellow, blue, brown, purple, pink, orange, and grey* (1991: 2). Once they felt they had narrowed each language’s color inventory down to the most basic color terms, through a controversial methodology that I will discuss shortly, they made universal discoveries that were as fascinating as they were widespread — cross-linguistically, they found a “fixed sequence of evolutionary stages through which a language must pass as its basic color vocabulary increases” (1991: 14). Basically, Berlin and Kay could show a linear order in which basic color terms would occur in a language. Table 1 below shows the stages in which Berlin and Kay classified languages along a continuum according to their color terms, “so that if a language encodes a category from a given class, it must encode all categories from each prior class” (14).

Table 1: Berlin and Kay’s Stages of Basic Color Term Evolution (Berlin 1991; 4)

Stage I	Black & White
Stage II	Red
Stage III	Green <i>or</i> Yellow
Stage IV	Green <i>and</i> Yellow
Stage V	Blue
Stage VI	Brown
Stage VII	Purple, Pink, Gray, or Orange

Therefore, any language that contained a basic color term for *blue* would also contain each of the basic color terms in stages I-IV above, leading up to a stage V language with *blue*, and implying the existence of universals among human conceptions of color and how they come to be encoded in language.

However, Berlin and Kay's work was not without controversy. One common site of contention within their book was their claims relating a language's basic color term inventory, as outlined in the stages above, to the evolution of the community of speakers. They state that they found "a positive correlation between general cultural complexity (and/or level of technological development) and complexity of color vocabulary" in which "all the languages of highly industrialized European and Asian peoples are Stage VII, while all representatives of early Stages (I, II, and III) are spoken by peoples with small populations and limited technology" (1991: 16). Saunders (2000), having revisited the exploration of color terms well after the initial publication of Berlin and Kay's work in 1969, critiqued in detail the cultural claims they made as well as the adjustments those claims underwent throughout subsequent revisions. She notes a 1975 revision that attempted to embrace the heterogeneity of language communities and emphasize the potential for individual speakers to "embody their own evolutionary stage" (82) before the more drastic revision of 1991 attempting to drop "all pretence to 'cultural' evolution" (83). However, we still find in the 1991 rendition the suggestion that "the sequence of elaboration of color lexicon is an evolutionary one accompanying, and perhaps a reflex of, increasing technological and cultural advancement" (Berlin & Kay 1991: 16).

In making such bold claims in support of universalism, as well as attributing those claims to cultural evolution and advancement, Berlin and Kay invited extensive critiques from anthropologists, sociolinguists and other researchers on the methods they used to reach these

claims (Saunders 2000; Crawford 1982; Conklin 1973). I have discussed earlier the ways in which universalist claims must necessarily and overtly involve a search for linguistic purity reducing data down to only its universally common traits. In many ways, this is essential to reaching a simplified, universal finding. However, as we have seen so far, a reduction or filtering of natural language data tends to remove the study from the genuine contexts in which the data naturally occurs and examines it isolated from the social features that inevitably condition it. It is for this reason that I join other scholars (Saunders 2000; Crawford 1982; Conklin 1973, among others) in finding Berlin and Kay’s criteria for defining a “basic color term”—a definition that ultimately decides the fate of the community of speakers along a continuum of evolution—to be insufficient at best and misleading at worst. Below, Table 2 outlines Berlin and Kay’s criteria for what constitutes a basic color term.

Table 2: Berlin and Kay’s Criteria for Basic Color Terms (Berlin 1991; 6)

<i>i.</i>	“It is monolexemic; that is, it’s meaning is not predictable from the meaning of its parts”
<i>ii.</i>	“Its signification is not included in that of any other color term”
<i>iii.</i>	“Its application must not be restricted to a narrow class of objects”
<i>iv.</i>	“It must be psychologically salient for informants”
<i>v.</i>	“The doubtful form should have the same distributional potential as the previously established basic terms”
<i>vi.</i>	“Color terms that are also the name of an object characteristically having that color are suspect”
<i>vii.</i>	“Recent foreign loan words may be suspect”
<i>viii.</i>	“Morphological complexity is given some weight as a secondary criterion”

While these criteria were doubtlessly intentionally specific and limiting to reduce the data to universal commonalities, they also tended to seek out a neat and pure form of the language which would conform neatly to *a priori* assumptions about color universals. Saunders (2000: 92) highlights the convenience of these criteria to reach conclusions of universality, calling it “a dubious achievement... to have merged Cartesianism and empiricism, to have hardwired the result (guaranteeing givenness).” She finds their criteria for basic color terms falls too conveniently into their conclusion, perhaps even unfairly forcing languages into lower standings in their stage framework of color term evolution, and therefore cultural advancement. Berlin and Kay present a number of their basic color criteria with little to no explanation or justification, leading researchers like Saunders to question whether the criteria were developed specifically to ensure that their *a priori* assumptions about color universals would be proven true. For example, criteria *vii* dictates that foreign loan words do not constitute basic color terms, but it lacks an explanation for why loan words should be rejected. Because these criteria lack any overt justification, some (Saunders 2000; Crawford 1982) reject their validity, even suggesting they were tailored to meet the desired results of the researchers.

In his detailed evaluation of just how a “basic color term” should be defined, Crawford (1982) dissects Berlin and Kay’s eight criteria and outright rejects a number of them based on existing linguistic practices. For example, Crawford calls for completely discarding two criteria which I consider in greater detail in the case study I present in the following section: *vi*, that color terms referring to objects are not basic and *vii*, that recent foreign loan words are not to be included. Crawford (5) explains that “the significant factor is how the term is used in the language, not how it originated” and therefore object-references should be included in an analysis if the language uses them like basic color terms. He argues that in English, while this

criteria would remove *orange* as a basic color term, most English speakers conceptualize *orange* as a basic color. In terms of Berlin and Kay's rejection of loanwords, Crawford (5) states that "this criterion should certainly be discarded, as it has been a basic principle of linguistic research for the whole of the present century that the correct way to investigate the historical development of a language is by comparison of synchronic studies of successive stages." He establishes that loanwords are just as much a part of the language as non-loanwords.

Languages are constantly adapting, changing, and interacting with one another. Who is to say a borrowed term is any less a valid feature of the recipient language than it is of the donor language? If we take English as an example, we find a myriad of potential borrowings from other languages throughout history that have reached various levels of natural English words. In his 2014 book entitled *Borrowed Words: A History of Loanwords in English*, Durkin examines borrowings in English through each time period of the language's development, finding one must attempt to define what percentage of English words are borrowings "with extreme caution" (2) because of the fluidity with which borrowings enter the language. What may be considered a borrowing at one time period may later be considered a natural part of the recipient language's lexicon. Borrowings are so frequent and so ingrained in language that we would do well to heed Crawford's advice and focus on how the term is used by its speakers rather than how it originated (1982: 5). In this vein, color term studies such as that of Berlin and Kay can benefit from including loanwords and analyzing them as they are used in practice, rather than discarding them in search of more purified data.

Although the most recent substantial revision came in 1991, Berlin and Kay's research on the universality of basic color terms continues to find itself at the center of contemporary color naming debates. Jameson (2005) compiled a number of studies on color naming, culture, and

cognition and analyzed their similarities and differences to illustrate the state of the art within studies of color naming. Among four prominent studies, she examines the contrasting views between universalist arguments of those such as Hardin and Kay, attributing universal elements of color perception to biological bases, against the culturally-dependent, relativist studies of Roberson and Paramei. Jameson's conclusions after considering each of the perspectives place her somewhere in between the two, recognizing influential biological elements on color perception but also realizing these questions "warrant the development of a more comprehensive explanation of cross-cultural color naming phenomena" and "that cultural studies and cultural factors should play greater roles in the new perspectives developed" (102). Again, we see a call for the inclusion of natural language data and the social influences that shape it rather than a rejection of complexities and variation to favor a more basic and easily digested form of the language.

Similar to Jameson's work, other contemporary research on universal and relativist properties of color terminology has left researchers in a middle-ground, recognizing some basic universal elements while also acknowledging the influence of socio-cultural elements in accordance with the relativist. While universal notions of color may provide a foundation for understanding color terminology, a relativist perspective incorporating social influence is required to paint a complete picture. Roberson et al (2004) studied semi-nomadic speakers of Himba in Southern Africa, testing how they perceived and named different color categories across both similarity tasks and memory tasks. Ultimately, they found differing results, with some pointing to clear universal attributes of color between Himba and English speakers and others indicating that color perception and description were strongly conditioned by culture and lifestyle. Their varying results led to the conclusion that "perceptual continua such as color may

thus be a special case for categorization with the consequence that the influence of culture (and language as the instrument of culture) may be strongest just for those ‘fuzzy’ sets for which there are not obvious discontinuities in nature” (406). They, too, were pushed towards a middle ground requiring an account of social influence to complete the picture originally begun by the universalist’s pure form. Cibelli et al (2016) reached similar conclusions in their studies of English speakers’ perceptions of color and how those perceptions may be biased or influenced by prior color stimuli. Their results found “both a universal color space and language-specific categorical partitionings of that space” (14) in which Berlin and Kay’s notion of basic universal color categories holds true, but those basic categories are further divided and altered according to the culture, life, and language of the individual. Universal considerations of color terms are illuminating in their own right, but the simplified version of language they seek is incomplete without acknowledging influences of relativity.

In 2018, Paul Kay himself engages with Surrallés’ 2016 study claiming that the Candoshi language’s basic color terms described by Berlin and Kay are not in fact basic color terms according to the very eight criteria that Berlin and Kay put forth themselves in 1969. Surrallés argues that various basic Candoshi color terms proposed by Berlin and Kay can be further divided into morphemes conveying references to objects, such as the Candoshi term for *black* actually being a term meaning something like “similar to tar” or “tar-like” (2016: 5). Kay instead argues that these forms exhibit “a derived adjective with a color meaning” (2018: 95) similar to English words like *inky*. The riff between Kay and Surrallés essentially boils down to the criteria Berlin and Kay originally crafted for defining basic color terms, which decides what color terms may even be analyzed as basic. Were the research to focus on describing color terms as they occur naturally in the language, unfiltered by preset criteria, then the disagreement would be an

unnecessary one and the researcher could simply describe the data as they discover it rather than attempting to conform it to a predetermined framework that ultimately determines their results.

The controversial criteria Berlin and Kay posited for defining basic color terms has been used exhaustively, even in studies and situations where the original authors likely did not intend for it to appear. As Levinson (2000: 3) puts it, their work “has carried a burden surely greater than ever intended by the authors” as their theory of universals has been applied widely within color studies and even to domains outside of color studies. In many ways, it has become relatively common practice to employ Berlin and Kay’s universalist framework even to descriptions of *individual* languages. Rather than describing the linguistic phenomena at work within the color inventories of the language under study, this research often begins with *a priori* assumptions of what constitutes a basic color term in a language and how those color terms compare to those of other languages. But the issue here is that when we study color terms in a single language but apply restrictions on our data reducing it to potentially universal traits and that elusive pure form, we inevitably lose the features of color terminology that make that language uniquely reflective of the community who speaks it. When looking at a single language, running our data through these predetermined processes and qualifications sacrifices an understanding of the unique influence that the culture of the speakers has on their language. Simplifying color terms according to Berlin and Kay’s criteria and establishing which evolutionary stage the language rests in tells us nothing about the lifestyle of the speakers and the way that lifestyle conditions their language.

However, these basic color term criteria appear as the methodological basis not only for strictly linguistic research (Abdramanova 2017; Kandi et al 2014) but also for cognitive experiments (Sun & Chen 2018) relating linguistic features of color to the mental processes of

the speakers. Despite their focus on brain functions and mental processes, these cognitive studies have similar implications to those conducted strictly within language documentation — they base their analysis on language data that has been filtered through Berlin and Kay’s criteria, stripped to a point of attempted purity, before ultimately reaching conclusions about the speakers of the language and their capabilities both linguistic and cognitive. Just as we see in strictly linguistic research, a futile search for purity ultimately results in an inaccurate portrayal of those studied.

In 2014, Kandi et al’s research on the Persian language sought to study the color terms of the language within Berlin and Kay’s framework to determine which basic color terms it contains and how many. Studying 200 subjects from six different cities in Iran, they presented their subjects with Munsell color chips, just as Berlin and Kay had done, to test their universalist claims (354). The subjects were asked to name each of the color chips in the least complex way possible before their responses were quantified and considered in terms of how many subjects agreed on each of the color names. Interestingly, Kandi et al found that “in high levels of agreement the Persian language includes 11 color terms” that appear to corroborate with Berlin and Kay’s theory (360). However, as they analyzed terms from speakers of different cities in Iran, they found a number of deviations from the theory due to regional variation. As discussed in Section 2 of this paper, accounting for variation cannot be thoroughly accomplished through methodologies that seek to filter data to a presumed pure form of the language. In the case of city-to-city variation in Persian color terms, Kandi et al briefly mention in their conclusion “that ethnic background and weather can influence the result of color categorization” (360). They seem to recognize, after their extensive studies on Persian color terms, that the purified forms sought by the universalist framework do not do justice to describing the variation they find in their data. Other influences, undoubtedly social, play an important role in determining their color

categorization, for example the previously mentioned influences of ethnic background and weather.

In 2017, we see an even clearer application of Berlin and Kay's universalist criteria to the description of an individual language's color terms in the work of Saule Abdramanova on the Kazakh language. Testing existing claims of basic color terms in Kazakh, Abdramanova took a different experimental approach to gathering her data. Rather than naming Munsell color chips, she asked her 65 young Kazakh-speaking subjects, generally around the ages of 18 or 19 years old, to simply write a list of all the color terms that come to mind in their language (4).

Comparing her results to the universalist theory, Abdramanova concluded that "the results of the present study generally confirm the universality of BCTs proposed by Berlin and Kay" (6) — however, that conclusion did not come without caveats. In reaching this conclusion, Berlin and Kay's basic color term criteria, outlined previously in Table 2, governed the methods of the study to the detriment of a complete description of Kazakh color terms as they pertain to the lived experiences of the language community. For example, Abdramanova finds multiple Kazakh color terms referencing the color of a horse's coat and essentially meaning *chestnut* and *dark brown* (4). But, adhering to Berlin and Kay's sixth criteria that basic color terms cannot be references to objects, the *chestnut* and *dark brown* terms are discarded in a search for the purely universal features despite obvious encodings of Kazakhstani lifestyle within these terms.

Because these terms for variations of brown are eliminated by the universalist criteria, Abdramanova does not include them in her analysis of basic color terms in Kazakh. However, she herself considers, albeit briefly, that "the Kazakhs were traditionally engaged in breeding of domestic animals, especially horses" and that this certainly played a part in the number of references to horses within their color terms (2017: 1). But if our goal is to fully describe and

understand the color terms of a specific language, and we know that language is itself a social phenomenon and thus requires a degree of social influence, why choose to exclude from the analysis these horse coloring terms that illustrate aspects of how the Kazakh people live? Looking only at their color terms, we see how language inevitably encodes culture and this is something we cannot afford to ignore.

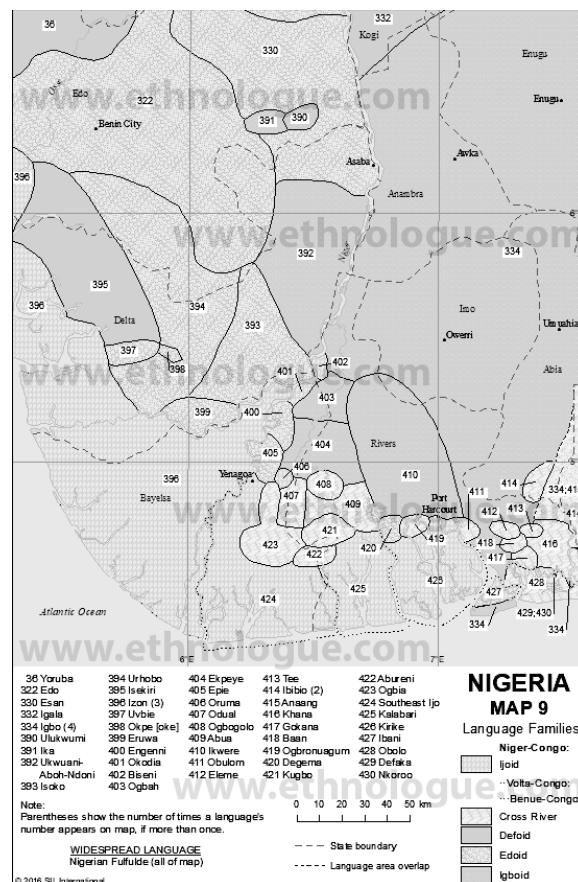
An even more recent case of this rejection of object references and their cultural implications can be found in the work of Sun and Chen and their 2018 description of basic color terms in Mandarin Chinese. In their study, sixty-three native speakers of Mandarin were asked to match their language's color terms, pre-chosen by the researchers from an existing database, to the appropriate color samples (3). They ultimately found a correlation between how English and Mandarin use basic color terms and concluded that therefore, much like Abdramanova had with Kazakh, their study confirmed much of Berlin and Kay's universalist claims. However, also like Abdramanova, Sun and Chen reached this conclusion through an application of Berlin and Kay's basic color term criteria that rejects valuable object references. In their study of Mandarin color terms, they explain that "some terms are names of common objects but are also used to commonly describe the color of another object," such as the word *cha*, which means 'tea' but is used in Mandarin to describe *brown*. Based on the universalist criteria, the term *cha* must therefore not be included in a discussion of basic color terms and is thus discarded. But what can we learn from the prominence of tea in the lives of Mandarin speakers leading to its use as a color term in the language? If we include this data and instead describe the Mandarin color inventory as it relates to its speakers, we learn much more about the power of language to subtly reflect the lives of those who use it. While we could certainly discover and describe the lifestyle and cuisine of Mandarin Chinese speakers via other disciplines such as history or anthropology,

the ability of the language to encode these cultural practices is uniquely fascinating and deserving of research in its own right.

Case Study: Èdó Color Terms

One language whose color terms have been filtered through universalist criteria even on the basis of an individual language description is Èdó, a Volta-Niger language spoken in southern Nigeria and one on which I have conducted much of my own fieldwork. Sometimes also called Bini, Èdó has been the subject of a number of documentation and description projects, most notably Agheyisi's grammar in 1990 and Ogie's description of multi-verb constructions and other features of the language in 2009. Agheyisi describes a thriving community of Èdó speakers number over 1.5 million at the time of her study (1990: 3). The language is tonal, consisting of a high and a low tone, and follows an SVO constituent order (Ogie 2009). The following map shows the precise region where Èdó is spoken, in area 322 surrounding Benin City.

Figure 1: Map of Èdó Speakers (via www.ethnologue.com 2019)



Despite its relatively large speaker population and the multitude of research on the language, little work has been done on Èdó color terms aside from Wescott’s 1970 description which attempted to describe them strictly according to the universalist criteria put forth by Berlin and Kay. In the following discussion, I will explore the case of Èdó color terms and the ways in which previous research on the topic has sought out the very pure form that I have cautioned against seeking throughout this paper. The language data I present is the result of fieldwork I conducted over three months in the summer of 2018 with a native Èdó speaker. My description of the color inventory of Èdó, and of the Moba language in the following section, is by no means exhaustively complete, psychologically or linguistically, but rather meant to illuminate specific ways in which linguistic descriptions of color inventories can benefit from the inclusion of social influence. The language consultant was born and raised in Benin City, central to the language area of Èdó, and moved to the United States in 1983. At the time of my fieldwork, she was 58 years old, a confident speaker of both Èdó and English, and living in the San Francisco Bay area of California. Below, Table 3 shows a rather simple but useful chart of Èdó color terminology as I collected it throughout our fieldwork sessions. The consultant was given a number of color samples and asked to describe them in the simplest terms she could.

Table 3: Èdó Color Terms

English	Èdó (IPA)
<i>Black</i>	nexui
<i>White</i>	nofua
<i>Red</i>	noba
<i>Blue</i>	nebulu
<i>Yellow</i>	noijelo

The first and most evident indicator that Èdó speakers' usage and understanding of color terminology is unique to their cultural context and not easily comparable to other languages like English is that Èdó does not have a word equivalent to the English word *color*. As seen in the data in Table 3, each of the color terms were only spoken in conjunction with *no* or *ne*, two phonological variations on the word meaning *thing*. While working with the native Èdó speaker, color terms originally came up spontaneously as I asked her to describe household objects present in the room, which inherently resulted in color terms attributed only to objects. Moving forward, multiple elicitation techniques were used to explore whether Èdó color terms could occur in isolation. First, the speaker was asked to name color chips, printed on a piece of paper, which again resulted in the *no/ne* forms seen above. Finally, the speaker was asked to simply translate English color terms, such as *black*, into Èdó. In all cases, the color terms spoken by the language consultant appeared with the *no/ne* forms. While the color black is conveyed in the word *xui*, it cannot exist alone and must be spoken as *nexui*, meaning *black thing*. Èdó speakers appear to conceptualize colors as properties of objects rather than standalone entities comprising a lexical domain of colors. Instead, the existence of a color is contingent upon the existence of an object taking on that color property — a feature of Èdó color terms left unexplored by universalist criteria.

Wescott's 1970 description of these color terms, notably published before Berlin and Kay revised their original 1969 work in 1991, sought specifically to describe the color terms present in Èdó through the lens of *Basic Color Terms: Their Universality and Evolution* (1969). Wescott explicitly states his reasoning behind eliminating potential basic color terms in Èdó, including the rejection of object references and the exclusion of loan words (1970: 351) based on the criteria set forth by Berlin and Kay. The expression of white, *fua* in Èdó, is immediately

discarded from the potential list of basic color terms because of its reference to yams, a common dish in southern Nigeria that is white in color and called by the same name. However, if we follow the ideal that language is both a reaction to, as well as a formulation of, cultural contexts and histories, we must conserve *fua* as a linguistic encoding of the way Èdó speakers have and continue to live. Through a rather simple color term, we discover the prominence of yams in southern Nigerian cuisine. As we search further, we discover details about the history of the Èdó people, finding that the British who colonized Nigeria took a strong liking to the region's yams while generally avoiding the more foreign taste of things like guinea corn in the north (Robins 2010). The language is a window into the lived experiences of its speakers.

We find still more clues toward the colonial history of Èdó speakers when we choose to conserve and investigate those color terms that are clear borrowings from other languages. Wescott is quick to discard both blue, *bulu*, and yellow, *ijelo*, on the basis that they are both clear borrowings from their English counterparts and therefore are not true lexical items of the Èdó language. If we are not so quick to discard the borrowed color terms, we begin to reveal the ability of language to encapsulate the history and timeline of the culture of which it finds itself a part of. When we ask ourselves *why* Èdó would have English borrowings for certain color terms, we begin to unmask rich histories of colonization and language contact. The use of English terms for colors in a language spoken in Nigeria is a clear sign of language change, and “most of what historical linguists study under the designation “language change” is due to contact” (Thomas 2003: 687). If we follow the historical trail of language contact that current linguistic evidence provides us the clues for, the Èdó language unveils the history of its people and those they interacted with.

Language contact between Èdó and English likely began in the early 1880s, as “the British gradually replaced the Dutch as the main trading power in the western half of the Niger Delta” (Bradbury 1957: 21). Bradbury describes in his ethnography of the Èdó-speaking people a period in which England made repeated gestures to open trade with the Nigerians but to no avail. Frustrated by disrespected treaties and a lack of trade, “in 1897 British troops attacked the captured Benin City” (Bradbury 1957: 21) at the heart of the Èdó language area and took administrative control over the region. British imperial rule meant incredibly heightened contact with English among Èdó speakers and eventually an enforcement of English education “as the only unifying solution to the newly merged country” (Danladi 2013: 4). English had already been established as the language of instruction in school in 1882 (Danladi 2013: 7) but an increase in military control meant an increase in language enforcement. This marked increase in “intensity of contact”(Thomas 2003: 689) meant a similar increase in the impact the contact has on the substrate language. Indeed, the effects are lasting ones as we see the influence of British colonial rule in Nigeria on current color terms in Èdó, specifically *bulu* ‘blue’ and *ijelo* ‘yellow’. The Èdó language consultant is quick to acknowledge the frequency of English use in Benin City both in and outside of a school environment today.

It is a remarkable aspect of Èdó, and indeed language in general, that it encodes in the language the colonial history of its people — an aspect that should not be ignored when seeking to wholly describe the features of the language. There are, of course, many avenues through which we can discover and study the colonial history of the people of Nigeria, but none of them are encapsulated in a growing, living form of nonmaterial culture such as this. To ignore these borrowed color terms in our description of Èdó is to ignore the very history and cultural experiences that shaped, and were shaped by, the language.

Case Study: Moba Color Terms

Moba, a term describing both the language and the speakers, is a Gur language spoken in Togo which provides another fascinating example of culture, both modern and historical, encoded within color terms that would otherwise be discarded by approaches that seek a pure form to analyze. Moba is spoken primarily in northwestern Togo, as shown in area 4 of the map below in Figure 2. According to Kantchoa's 2006 grammar of Moba, the language had over 200,000 speakers as of 1995.

Figure 2: Map of Moba Speakers (via www.ethnologue.com 2019)



The data I will use in the following discussion of Moba color terms is the result of regular fieldwork sessions throughout 2018 and 2019 with a native Moba speaker, age 32, who was born in the Moba speaking part of Togo shown in Figure 2 above. Again, the data is by no means an exhaustive description of Moba’s color term inventory, but instead a look at how the data can be analyzed as-is, in a way relevant to the culture of the speakers, without attempting to reduce it to a more digestible or ideal form. Table 4 below shows a list of potential basic color terms in Moba and how they might be analyzed in this way.

Table 4: Moba Color Terms

English	Moba (IPA)
<i>Black</i>	bunbuan
<i>White</i>	bumpjen
<i>Red</i>	bummuan
<i>Blue</i>	bumblu
<i>Yellow</i>	bundug

There are fascinating avenues of research investigating how a language like Moba could share universal commonalities within its color terms cross-linguistically, but if the goal is to describe the language in completeness then the true intrigue of Moba color terms is found in their uniqueness to the culture that uses them. Moba, like Èdó, does not contain a lexical item equivalent to the English noun *color*, which again is an early indication that Moba speakers may conceive of colors in a way unique from speakers of other languages such as English, and therefore one should be hesitant to try and place the languages cleanly on the same scale if we are to truly understand the depth of Moba color terminology. Moba also does not show any evidence of color terms appearing freely without a noun which they describe, but instead always attached to the word *bum/bun*, meaning *thing* and showing slight phonological variation

depending on the environment in which it appears. The same elicitation techniques were used for Moba color terms as previously described for Èdó — throughout color chip naming tasks, describing objects in the room, and translating isolated English color terms, no Moba color term occurred without the *bun/bun* form. It becomes difficult to evaluate a language such as this via the same criteria as a language such as English, with a lexical category of colors as free nouns, without losing a sense of the strong cross-linguistic variation taking place. Moba and English may both have a color term for *red*, but that term manifests itself in entirely different morphosyntactic constructions, and therefore likely different mental representations, from one language to the other. While an English speaker can conceive of *red* without an attachment to any particular object and can simply convey that via the English lexicon, a Moba speaker's language would condition them to represent *red* as a property of another object rather than itself its own entity.

Analyzing Moba's basic color terms with strict adherence to Berlin and Kay's universalist criteria removes a number of terms providing linguistic vantage points into the lifestyle of its speakers. Their sixth rule from Table 2 eliminates those color terms that also reference the names of objects typically of that color (Berlin 1991), effectively removing the Moba term for yellow, *bundug*. The Moba term *dug* references the acacia tree, the fruit of which is typically yellow in color and abundant in Togo — a fact that, to the universalist, renders the term useless for analysis but, to the relativist, provides intriguing insight into the way the world surrounding Moba speakers permeates their color terminology. Through the inclusion of *bundug* in our analysis, we reveal the ways in which a language's choice of lexical items describing colors encodes the way of life of that speech community. While Èdó speakers borrowed their term for *yellow* due to a history of British colonization, Moba speakers established their own

term due to the flora populating their region. Even within the relatively narrow realm of color terms, we see evidence of the way our surroundings influence our language.

Another, less readily apparent example of object references in Moba color terms became clear in my investigation of the color *green* during a fieldwork session with the native speaker. In most instances, a Moba speaker would use *bunbuan* (*black* in English) to describe colors most English speakers would describe as *green*, leading the universalist to classify Moba as a language lacking a basic color term for *green*. However, to classify Moba as lacking a color term for *green* is to imply a lack of competency in those who speak the language to properly convey *green*, which is simply untrue. Further research exposed that, when specificity is necessary, Moba speakers are indeed more than capable of conveying a sense of *green* independent of a sense of *black*, as seen in the example below, produced by the native speaker.

<i>bunbuan</i>	<i>ŋɔ̃</i>	<i>tig</i>	<i>fa:d</i>
thing black	like	tree	leaves
'black like tree leaves'			

The above example, while clearly in violation of Berlin and Kay's sixth criterion with its explicit reference to an object, is evidential of the competency of Moba speakers to convey the color *green* with a specificity beyond the scope of what a universalist analysis would imply. In the context of Berlin and Kay's stages of color term evolution (see Table 1), Moba would likely be classified as a Stage II language containing only *black*, *white*, and *red* as basic color terms, implying a lower competency in color description than a Stage III language containing all those same terms plus *green* or *yellow*. However, as we've seen above, Moba speakers are entirely capable of conveying *green* as opposed to *black* by relating the appearance of the object to the

appearance of leaves on a tree, they just cannot do so within the constraints of Berlin and Kay's universal color term criteria. This competency is all but overlooked when we are too eager in our classification of the language as Stage II with only three basic color terms. Object references are not the only Moba color terms to fall victim to universalist criteria, as the term for *blue* is a clear foreign loanword and therefore in violation of criterion number seven, reminiscent of the borrowed term for *blue* in Èdó.

While modern Nigeria includes English as an official language and thus provides a rather clear context for English borrowings in Èdó, the official languages of Togo are French and German. How does an African country officially speaking French and German come to adopt the English color term *blue*? Perhaps the borrowing is from the French *bleu*, or perhaps the answer is a more complicated process of colonization, at least geographically.

Sharing a border with Togo is Ghana, with an official language of English due to British control during the colonial period. Ghana's status as an English-speaking nation may be the link enabling English borrowings in Moba. As West Africa was shaken up by French, German, and British colonialism, nations began to form and divide, but linguistic borders remained much less clear than national borders. When British and French forces divided up the area that is now both Ghana and Togo, they drew up boundaries which created a "quasi-ideal natural experiment, where, by historical accident, individuals with otherwise identical backgrounds found themselves randomly divided into two groups"(Cogneau 2014: 696). Languages do not respect national borders the way citizens do, and the dividing up of Togolese and Ghanaians did not cleanly divide the languages. It is likely that great amounts of cross-border communication resulted in more of a melding of English and Moba than colonizing nations would have desired at the time.

As is the case with borrowings in Èdó color terms, justice cannot be done to a holistic description of Moba color terms without reference to the cultural histories they encode. To say that Moba does not have a term for the color *blue* is to rob the language of its status as a living reflection of a culture that has endured harsh periods of colonization and division.

Conclusion

Language documentation, as the many contrasting research perspectives discussed earlier illuminate, is a contentious field with a variety of goals and methodologies that manifest in the greater debates of the discipline. These varying methodologies and the debates among those who use them often invoke the pervasive underpinnings of a futile search for a *pure* form of a language that attempts to extract the language from the culture of its speakers. We find this quest for purity in discussions of revitalization projects in which linguists debate which form of a language to revitalize, some preferring a pure, unchanged, and perhaps historical version while others argue for the revitalization of a language inclusive of modern influences from language contact and other social phenomena (Childs et al 2014; Austin & Sallabank 2011; Woodbury 2005; Eades 1988). We see it again in the work of a number of researchers on exactly how language documentation should account for linguistic variation, often calling for new methods of describing variation because traditional methods seeking a pure form do not accurately or thoroughly reflect those varieties (Meyerhoff 2017; Skilton 2017; Marten & Petzell 2016; Childs et al 2014; Migge & Léglise 2012; Gippert et al 2006). We find it also in the timeless debate of linguistic relativity and universality, as universalists openly embrace a certain degree of filtration and purity in the common forms they discuss while relativists encourage an inclusion of unique cultural influences in the analysis of their data (Papafragou et al 2002; Fleming & Slotta 2018; Bylund & Athanasopolous 2017). Finally, we see it in the differing approaches to describing a language's color terms, often closely aligned with either relativism or universalism, in which some seek to reduce color term data to its simplest, cross-linguistically common attributes, while others embrace the importance of including cultural and social contexts that affect these terms

(Jameson 2005; Roberson et al 2004; Saunders 2000; Berlin & Kay 1991; Crawford 1982; and many others).

I have explored the latter in greater detail through a discussion of my own color term research on two different languages of Africa, showing how pursuits of linguistic purity fail to properly account for sociocultural influences on the language — in this case, particularly with regards to their rejection of loanwords and object references. We have seen how, in both the Èdó language of Nigeria and the Moba language of Togo, these borrowings and object references are as integral to the language and culture of the speakers as any other part of their lexicon. The borrowings encode in each language their histories of colonization and intercultural contact, providing a linguistic map of their peoples' history. The object references encode their cuisine, the environments and climates they live in, and their general ways of life. Ignoring these aspects of the language in pursuit of a pure form unadulterated by historical contact and social influence unfairly implies a lack of complexity and adequacy in the language and ignores the integration of language and lifestyle. These implications are made worse when the conclusions of such purist research relate the findings to cultural evolution and technological advancement, using an incomplete linguistic methodology to explain how one culture may be subordinate or superior to another.

Contemporary research reminds us that researchers have a responsibility to hold themselves accountable for the social implications of such work. Heller and McElhinny's comprehensive 2017 book on "how ideas about language play a central role in the making of social difference and social inequality" (2) provides an in-depth look at past and present research and how that research can have lasting effects on the social inequalities of research communities. They borrow Raymond Williams' (1989) concept of "walking backwards into the future,"

arguing that researchers must diligently reflect on the consequences of past research when deciding how to conduct future research. To continue to progress in terms of socially and culturally-sensitive research that benefits the communities in question, language documentation must strive to describe linguistic features holistically, depicting an accurate portrayal of the inextricable link between the lived experiences of speakers and their way of speaking. Rather than reject apparently convoluted and messy data, we must embrace that language data will always be living and changing according to the lifestyles of its speakers. To use the words of Migge and Léglise (2012: 330), instead of filtering language to a pure and convenient form, we must recognize that “heterogeneity is not a headache or disturbing noise that the linguist must ignore or dominate by parceling it off into sets of homogenous grammars. Like any other rules or principles of language, it can be discovered and described.”

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