Colour as pronoun: Josef Albers's colour deixis

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This article excavates Indigenous perspectivism as a subterranean influence on the innovative visual art and colour pedagogy of Josef Albers (1888-1976). Extending earlier studies of Albers's engagement with Indigenous arts of the Americas, the relational dynamics of perspectivism are explored as an underlying conceptual framework for the Mesoamerican architectural and design forms mined by Albers. Radical anthropologist Eduardo Viveiros de Castro's theorisation of perspectivism as the differential reciprocity of gazes exchanged by hunter and prey illuminates the situational character of Albers's approach to colour. The resulting "shifter"-like character of Albers's deployments of colour is further contextualised in relation to the pioneering semiotic research of Karl Bühler (1879-1963) on deixis: the indexicality of human—and animal—sign systems. Bühler belonged to the Vienna Circle of thinkers whose impact on the pedagogy of the Bauhaus, where Albers taught prior to immigrating to the United States in 1933, has been previously documented by Peter Galison, among others. Bühler's formulation of pronouns as context-dependent modes of reference, in particular, reveals a striking correspondence with the relationality of Indigenous perspectivism as a function of trans-species personhood, suggesting that these frameworks were complementary and mutually reinforcing for Albers.

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Introduction

In the short story "Axolotl," Julio Cortázar relates the curious tale of a man's gradual metamorphosis into the titular Mesoamerican amphibian. Captivated by the creatures on a visit to the Jardin des Plantes in Paris, the protagonist begins making daily visits to the aquarium that houses them. Despite their eerily larval appearance, he is haunted by the salamanders' "mysterious humanity" [1 p.6]. At the same time, however, the animals represent a stark alterity, "another way of seeing" embodied by their lidless golden eyes [1 p.5]. Ultimately, the man's transformation into an axolotl hinges on an exchange of perspectives: one moment he is looking at his own reflection in the aquarium, the next moment he sees himself from the perspective of an axolotl.

Ana Carolina Cernicchiaro proposes that Cortázar's vivid representation of this exchange of embodied perspectives is consistent with Eduardo Viveiros de Castro's theorisation of Indigenous perspectivism [2-3]. Broadly characteristic of Indigenous cultures of the Americas, perspectivism refers to relational cosmologies defined by the common "point of view" shared by human and privileged other-than-human subjects, each of which sees the world "in the same way" [3 pp.472, 477]; what changes is *what* is seen. That is, each class of beings views the world from the perspective of their own distinctive sociality. Consequently, what humans see as a waterhole appears to tapirs as a ceremonial lodge. The transspecific subject positions constituted by this play of gazes imply a common, though mutually exclusive, condition of personhood: each category of person sees itself as human, and the other as non-human (and vice versa). The result is what Viveiros de Castro terms "multinaturalism"; namely, "a unity of mind and a diversity of bodies" [4 p.56]—the precise inverse of European relativisms, which correlate embodied difference with a diversity of mentalities. The multinatural ontology of perspectivism elucidates the humanity that the protagonist of "Axolotl" attributes to the amphibian objects of his gaze ("every axolotl thinks like a man inside", he insists), even as his own "human mind" remains intact following his transformation into one of the creatures [1 p.8].

In this article, I follow Cernicchiaro's lead in shifting perspectivism out of its habitual anthropological contexts of application; in this case, to address novel art-historical questions. I propose that Viveiros de Castro's delineation of the "pronomial" dynamics of Indigenous phenomenology provides a framework for formalising the aesthetic lessons that modernist artist Josef Albers (1888-1976) drew from pre-Columbian sources to formulate his influential colour pedagogy [3 p.478]. As summarised below, previous scholarly accounts of Albers's engagement with Prehispanic aesthetic principles, while valuable, have been largely confined to the identification of specific architectural motifs from which the artist likely drew inspiration, as well as critical assessments of his acquisition of pre-Columbian cultural belongings in collaboration with his wife, artist Anni Albers. Only art historian Eva Díaz has departed from this formalist line of inquiry, situating Albers's pedagogical strategies within a broader "field of social relations" [5 p.29]. Drawing on Viveiros de Castro's description of Indigenous perspectivism as "deictic" [3 p.478], the present study amplifies Díaz's analysis of the sociality of Albers's colour praxis as specifically pronomial in character. I ground these observations in prior scholarship on the perspectivist "folk biology" and "complementary polarities" that conceptually and materially shaped historical Mesoamerican painting traditions and visual culture more broadly as well as empirical scholarship on the situated "points of view" manifested by the overlapping colour categories employed by contemporary Mesoamerican language speakers [6 p.139, 7 p.154, see 8 p.xix]. I further demonstrate how Albers's social grammar of colour harmonises with the semiological investigations of the Vienna Circle, whose logical positivism Díaz has previously linked to Albers through the currency of Vienna Circle thought at the Bauhaus [see 5 p.40], where Albers studied and taught prior to his immigration to the United States in 1933.

Aims and scope

Situating my intervention within a longer reception of Albers's art and colour pedagogy that has persuasively established conceptual, formal and material parallels between his practice and Indigenous models first calls for reflection upon the contested applicability of Viveiros de Castro's perspectivism to the Prehispanic societies of Mesoamerica. Although Viveiros de Castro's initial theorisation of perspectivism as a cosmopolitics in which bodies are sites of reciprocal points of view constitutive of differential worlds was informed by the anthropologist's fieldwork in Amazonia, his conclusions have

found wide applicability across such diverse domains as anthropology, archaeology, and art history in research devoted to Indigenous cultural practices distributed across the Americas, and even beyond. Viveiros de Castro himself clarifies that, "These ideas can also be found, perhaps with even greater significance, among the cultures of the northern regions of North America and of Asia, and more rarely, among some tropical hunter-gatherer peoples of other continents" [9 pp.38-39].[1] Applying Viveiros de Castro's insights to study the jaguar and feline iconography of ceramics produced by the Andean La Aguada culture of Northwest Argentina, Andrés Laguens seizes upon the promising insights generated by this case study to discuss the broader relevance of perspectivism to contemporary archaeological research on the material cultures of global Indigenous populations located outside the Americas [see 10 p.46].

Nonetheless, there has also been a persistent resistance to the application of perspectivism to the study of Prehispanic societies of Mesoamerica such as the Maya, Nahua ("Aztec"), and Zapotec [see 11 p.324], whose hierarchical organisation and specialised socio-economic roles were incommensurable with the relatively horizontal distribution of power and primacy of predation that characterise the political economies of the Indigenous societies of Amazonia studied by Viveiros de Castro. Klein *et al*. rightly critique an older tradition of scholarship that indiscriminately applied universalising constructions of shamanism to the study of—first Olmec and Nahua, and subsequently Maya—cultural belongings [see 12-14]. These studies were oriented toward the identification of supposed iconographic manifestations of shamanism such as the "World Tree" and "cosmic portal" [14 p.55, 15 p.161]. Such reductive and homogenising applications of shamanism do not adequately account for the complex vertical organisation of these societies nor the historical specificity of culturally and regionally distinct manifestations of shamanic practices and the specialised roles of ritual practitioners. Klein *et al*. count some 40 distinct roles within historic Nahua society alone [12 p.399]. Nevertheless, Klein *et al*. do not deny that shamanism was practiced in Mesoamerican societies (notably, by rulers who assumed priestly offices that incorporated shamanic rituals); rather, they concur with fellow critics such as David Webster in emphasising that such practices and roles were "grafted onto" complex political economies whose decisive influence on socio-cultural realities should not be overlooked [Webster quoted in 12 p.399].

In applying a perspectivist lens to contextualise Albers's encounter with Indigenous arts of the Americas, it is not my intention to perpetuate homogenising "shamanic" constructs of the type critiqued by Klein *et al*. Instead, like Viveiros de Castro, Laguens, and Thomas and Humphrey [see 16], my approach acknowledges the material diversity and historical-political specificity of global shamanic practices and perspectivist phenomenologies. In particular, this study builds on more recent uses of perspectivism in research on the ritual cultures of Mesoamerica, such as the scholarship of Alonso Zamora Corona on the contemporary ceremonial practices of K'iche' Maya [see 11]. Like Zamora Corona, my investigation of Albers's intuitive engagement with dimensions of Indigenous cultural practices that we would now recognise as specifically perspectivist will prioritise material and technical considerations while putting aside the vague and ahistorical mysticism evoked by some earlier studies.[2]

Miguel Astor-Aguilera proposes a fruitful synthesis of perspectivism with the animist and analogical ontologies described by anthropologist Philippe Descola; the resulting account of Mesoamerican

[1] Viveiros de Castro's theorisation of the common personhood of hunter and prey is explicitly indebted to the scholarship of A. Irving Hallowell on "other-than-human persons" in Anishinaabe ontology [62 p.60].

[2] My commitment to materialist approaches to the study of Indigenous phenomenologies and visual culture as influences on Albers's mature colour pedagogy must also be distinguished from scholarship on the currency of Meister Eckhart's mysticism at the early Bauhaus, and as an influence on the colour pedagogy of Albers's teacher Johannes Itten in particular [see 63 p.220, 64 p.107].

cultural practices is appropriately "polyontological" [17 p.136]. Such "Mesoamerican hybridity did not begin with European contact," Astor-Aguilera notes; "Indigenous Americans had extensive trading networks where heavy interaction spread influential ideas. Morphable ontological-being is present throughout much of Indigenous North and South America" [17 p.136]. Descola himself recognises perspectivism as, in the words of Viveiros de Castro, "a subtype of animism" [4 p.78], thereby "rais[ing] the possibility of the coexistence of different schemas or of their existing in a continuum," as Laguens relatedly observes [10 p.49]. The nuanced materialism of Zamora Corona and Astor-Aguilera is consistent with Bassett's employment of perspectivism to contextualise the significance of jaguars and other "man eaters" in historical Nahua folk biology as well as Magaloni Kerpel's perspectivist interpretation of Nahua painting traditions that can be connected to shamanic songs—two sources that I invoke in my discussion of Albers below [6 p.149, see also 7 p.153].

Notwithstanding Viveiros de Castro's decolonial ambitions, it must be admitted that perspectivism retains a residuum of modernist universalisation reflective of its origins in the colonial discipline of anthropology. There is notably an inherent tension between the cross-cultural applicability of this framework—however nuanced in its individual applications—and contemporary calls to center Indigenous voices in the study of distinct cultures and societies. This being said, the present article explicitly and deliberately does not presume to undertake an original anthropological or archaeological account of a specific Indigenous culture, but sets out, rather, to study the situated reception of Indigenous arts from across Central and South America by Josef Albers, a modernist German American artist. With this aim in view, the relative generalisability of the perspectivist framework is actually in tune with, and helpful for historicising, the modernist assumptions of Albers, who, like many artists of his era, sought to identify perceived commonalities and continuities across cultures and time periods. While recognising the modernist syncretism inherent to Albers's transcultural engagement with arts produced by multiple historic societies of the Indigenous Americas, this article will simultaneously draw attention to the artist's innovative and respectful exploration of the material dynamics of Indigenous arts—a focus that resonates with the more recent materialist insights of Astor-Aguilera [17], Bassett [6, 18], Magaloni Kerpel [7, 19], Pitrou [20], and Zamora Corona [11]. In doing so, this article also furthers the decolonial aim of recognising the influence of Indigenous cultural traditions on global modernisms.

Finally, although this article aims to move beyond descriptive, formalist approaches to the documented parallels between Albers's art and colour pedagogy in order to elaborate explanatory frameworks, it by no means presumes to be an exhaustive account of Albers's rich aesthetic legacy. It is my aim to stimulate future research and discussion, not to foreclose constructive debate.

Literature review

There is a well-established literature connecting Josef Albers's formal explorations to Indigenous aesthetics of the Americas [see, for example, 21]. The present study is both indebted to this body of scholarship, but also seeks to clarify and expand the relationship between his chromatic investigations and Prehispanic art and phenomenological frameworks. From the outset, art-historical analysis of this relationship has focused on formal parallels between the paintings that Josef Albers produced following his and Anni Albers's first visit to Mexico in 1935 and the architectural features of the archaeological sites that they encountered on their Latin American journeys. In his dissertation, Finkelstein noted the "architectural references" of paintings produced in the wake of the Alberses' inaugural Mexican journey such as the *Archaeologic* series and *Temple* (all 1936), whose geometric motifs recall "the monumental forms of temple ruins" [22 p.117]. In particular, Finkelstein proposed that the recurring motifs of "gate"

and "window" found in Albers's works of the later 1930s and 1940s are artifacts of this dialogue with Mexican architecture, further noting that a number of the artist's titles make direct allusion to specific archaeological sites [22 p.118]. The scholarship of Brenda Danilowitz is indicative of the consensus achieved by Finkelstein's hypothesis: "Intimations of architectural plans and facades of buildings," Danilowitz has written, "are the subliminal configurations of many of the 1950s and 1940s paintings and studies" [23 p.94].

Benezra identified Albers's extensive photographic documentation of the thirteenth-century pyramid at Tenayuca as supplying the strong diagonals of the artist's eponymous series from 1941-43 [see 24]. At the same time, Benezra observed that some works inspired by Albers's Mexican travels bear the stamp of peasant adobes and other vernacular structures. Danilowitz subsequently pursued the latter line of investigation, noting that "The colors of the *Adobe* paintings are unimaginable without the highly colored painted exterior walls of flat roofed Mexican houses, their tall windows framed with contrasting, sometimes clashing, hues" [25 p.27]. By contrast, Kelly Feeney revisited Finkelstein's focus on temple architecture in likening the nested squares of the *Homage to the Square* series (1950-1976) to a four-platform pyramid viewed from above [see 26]. Kiki Gilderhus extended Benezra's discussion of the role of photography in Albers's practice, arguing that the artist's photocollages operated as "a tool of analysis" that was indispensable to his distillation of geometric motifs from the architectural forms that he studied in Mesoamerica [27 p.123].

Gilderhus additionally posited an alternative to James Oles's suggestion that the *Tenayuca* paintings combine aerial and profile projections of the pyramid complex; namely, that Albers's Tenayuca motif is a stylised representation of the coiled serpent sculptures located at the base of the pyramid, which the artist documented in a photocollage [see 28]. Juaquín Barriendos has likewise explored "the architectural dimension of color" expressed by Albers's art [29 p.36]. Indebted to Gilderhus's analysis of the *coatepantli* (wall of serpents) at Tenayuca, Barriendos shifts attention onto the metaphysical symbolism of the more abstract and multivalent *xicalcoliuhqui* (stepped-fret) motif, which Albers extensively photographed at the archaeological site of Mitla in Oaxaca (Figure 1).

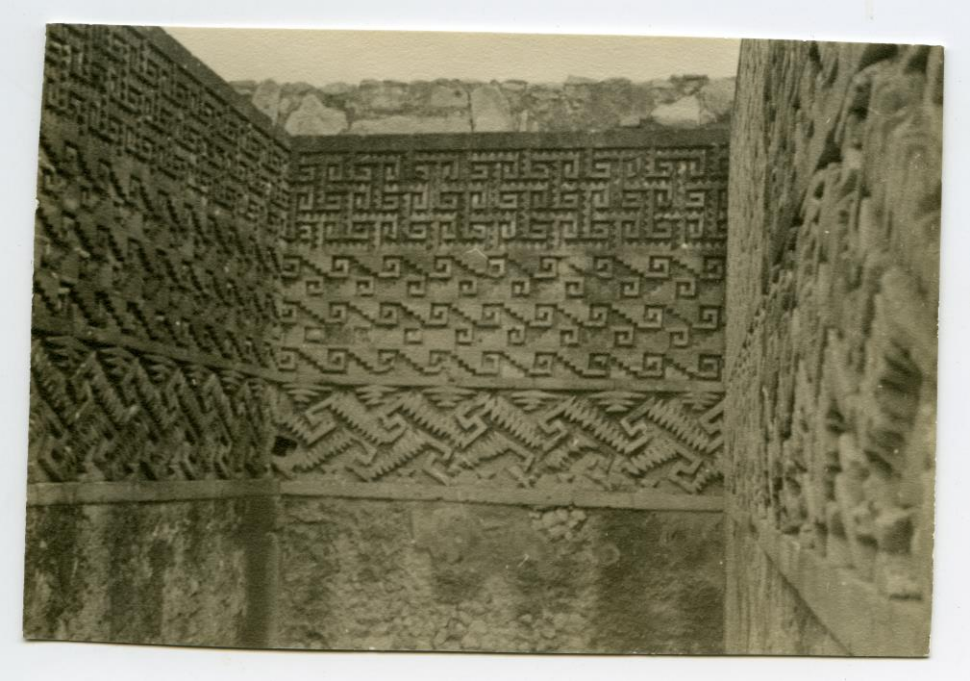

Figure 1: Josef Albers, Detail of Mitla, Mexico, 1935. Gelatin silver print, 3 3/16 x 4 11/16 in. (8.1 x 11.9 cm).
© 2024 The Josef and Anni Albers Foundation/Artists Rights Society (ARS), New York.
Photo: Tim Nighswander/Imaging4Art.

In Barriendos's view, the "irresoluble perceptual situations" staged by the ambiguous geometry of the Tenayuca series and related works correspond with the spiritual symbolism of ascent and descent unfolded by the chromatic relationships of the *Homages* [29 p.39]. This reading amplifies Jean Charlot's speculative interpretation of the *Homages* as encrypting "a mummy's outlook from the burial chamber" [30 p.196], a hermeneutic that harks back to the fraught efforts of some earlier Mesoamericanists to identify pyramid forms with shamanic motifs such as the World Tree and cosmic portal, discussed earlier. In reassessing this symbolically multivalent motif as a transcultural and transmedial expression of a widespread perspectivist paradigm, my reading of the stepped-fret is consistent with Virginia Gardner Troy's recognition that its distribution ranged from the Andes to Mesoamerica in a diversity of media ranging from architecture to textiles [see 31 p.92].

Likening the Alberses to latter-day colonial explorers such as John Lloyd Stephens (1805-1852), Lauren Hinkson has argued for the methodological significance of Josef Albers's photocollages, observing that they render visible the forms of "active looking" cultivated by the artist as a practice for understanding non-Western cultural forms [32 p.19]. Pursuing related post-colonial insights, Jennifer Reynolds-Kaye has historicised the Alberses' acquisition of a significant collection of Prehispanic cultural belongings (over 1,400 items), initially obtained through a relatively unregulated Mexican market and subsequently purchased from antiquities dealers in New York following the couple's move to New Haven, where their collection now forms a part of the Yale Peabody Museum of Natural History [33, see also 34].[3] While drawing attention to this fraught context, Reynolds-Kaye simultaneously underscores the staunch anti-Primitivism that characterised the Alberses's collecting activities, which departed from the colonial logic of earlier collection-building projects in situating the achievements of Prehispanic artists squarely in the present.[4] Josef Albers, Reynolds-Kaye notes, was drawn to the formal qualities of Prehispanic artworks to the extent that they embody their creators' keen awareness of the limitations of their media and technologies [see 33]. This observation echoes the materialist orientation of Díaz's analysis, which posits that "in pre-Columbian sculpture [Albers] found the signal example of a sophisticated understanding of the technical potentials and limitations of medium" [5 p.23].

Departing from the architectural focus of most scholarship on Albers's Prehispanic sources, as well as its regional emphasis on Mexico, a smaller body of literature has looked to the influence of other media and of the Alberses' travels further afield in Latin America. The 2007 publication *Anni and Josef Albers: Latin American Journeys* was decisive in expanding the field of inquiry to include the Preliminary Course that Josef Albers taught at the Pontificia Universidad Católica (PUC) in Chile in 1953, as well as Josef Albers's careful study of Andean weavers' mastery of colour phenomena [see 35 p.61, 36 p.14, 37]. Danilowitz [see 38 p.143] similarly attributes Josef Albers's decision to limit his medium to unmixed pigment applied straight from the tube to his exposure to traditional Andean weaving techniques.

Heinz Liesbrock has more recently revisited the liberatory effect of Albers's exposure to Mexican arts on his colour investigations, culminating in the *Homage to the Square* series. Indeed, Liesbrock makes a convincing case that "hardly any Western artist of the early twentieth century engaged in such a productive exploration of an ancient non-European culture as Albers did in the case of Mexico" [39

[3] Virginia Gardner Troy similarly recognises that, "The Alberses' awareness of non-Western and ancient material culture was fueled by European colonialism" [31 p.87].

[4] While Albers's exposure to Indigenous arts of the Americas can be traced at least as far back as a 1908 visit to the Museum Folkwang and subsequent visits to the ethnographic collections of the Berlin Museum für Völkerkunde [see 33 p.27; 31 p.87], Albers's mature interest in Indigenous arts—following his first visit to Mexico in 1935—constitutes a decisive break with the primitivism embodied by articles devoted to modernist "savages" in the pages of *Der Blaue Reiter*, which typify the European milieu of the artist's initial formation [see 65-66].

p.16]. He underscores the transformative and anti-primitivist character of Albers's interface with Mexican models, which never relied on mere iconographic borrowing, but instead adapted the deep structures of aesthetic systems. In another contribution to the same exhibition catalogue, Vincent Broqua discusses Albers's performative and strikingly visual approach to language in *Interaction of Color* and other texts, as well as the artist's conceptualisation of colour itself as a form of "grammar" [40 p.278]. The latter proposal is complementary to my own meditations on the pronomial status of colour in Albers's art, below.

Colour and perspectivism

Viveiros de Castros's articulation of perspectivism opens up a new and fruitful path of approach to interpreting the Indigenous inflection of Albers's relational colour praxis. Re-reading Albers's chromatic experiments through a perspectivist lens enables a formalisation, and cultural contextualisation, of previous observations regarding the ambivalent perceptual dynamics of the step-fret motif rehearsed by the artist's *Tenayuca* (1942-1943) and *Homage to the Square* series. The "fallibility of perception" embodied by the ambivalent contours of this figure is not unique to either architectonic or woven contexts [33 p.59]. Rather, the reversible but mutually exclusive points of view delineated by the *xicalcoliuhqui* draws attention to perspectivism as a pervasive cultural a *priori* among Indigenous societies of the Americas. Laguens observes that "Perspectivist ontology is not exclusive to South America. With some variation, it is also found throughout the Americas, including among the Maya in Mesoamerica, the North American Zuni, Hopi, Cree and Ojibwa, and Pacific Northwest coastal groups" [10 p.38]. The shamanic origins of Tezcatlipoca, patron deity of the Nahua monarchy, is paradigmatic of the perspectivist currents that shaped historical Mesoamerican visual culture in particular [see 41 p.2001]. The competing percepts materialised by the step-fret correspond to the plurality of perspectives characteristic of multinatural cosmologies, in which different categories of person enjoy formally equivalent points of view onto non-commutative worlds. Perspectivism permits a generalisation of previous scholars' insights into Albers's creative synthesis of these perceptual dynamics, which, far from being restricted to a particular decorative motif, delineate the contours of a widespread relational cosmopolitcs.

While the imprint of Indigenous perspectivism may be more immediately legible in such linear works as the *Graphic Tectonics* (1942-1948) and *Tenayuca* series (Figure 2), whose ambivalent dimensionality echoes the "contour rivalry" of the step-fret motif noted by Reynolds-Kaye [33 p.59], Indigenous phenomenologies can equally illuminate the contingent character of colour embodied by Albers's oeuvre as a whole. In particular, Viveiros de Castro's [3 p.472] articulation of the shared "human condition" embodied by both human and non-human points of view in Indigenous cosmologies elucidates Albers's experimental proof of "the relativity of color" by making "one and the same color look different" through contextual colour relationships [42 p.8]. Just as physiological differences ordinarily obscure the common humanity of hunter and jaguar, the broad stripes of the iconic study by Albers's student Fred Umminger (Plate IV-1 in the original, unabridged edition of *Interaction of Color*) cleverly disguise the identity of the smaller ochre squares (Figure 3) [see also 43]. The striking homology between the contextual use of colour in this student exercise and the perspectival humanity common to human and non-human persons in Indigenous ontologies opens up a new path of approach to Albers's oft-evoked materialism.

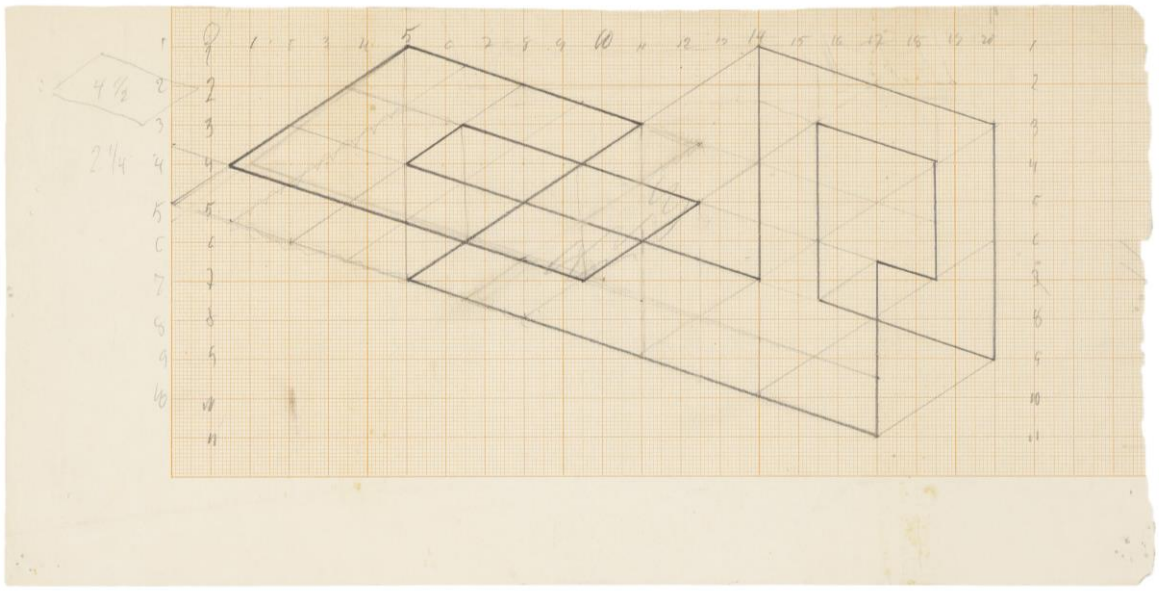

Figure 2: Josef Albers, Study for Tenayuca, ca. 1942–43, Pencil on paper, 5 7/8 x 11 1/2 in. (14.9 x 29.2 cm). © 2024 The Josef and Anni Albers Foundation/Artists Rights Society (ARS), New York. Photo: Tim Nighswander/Imaging4Art.

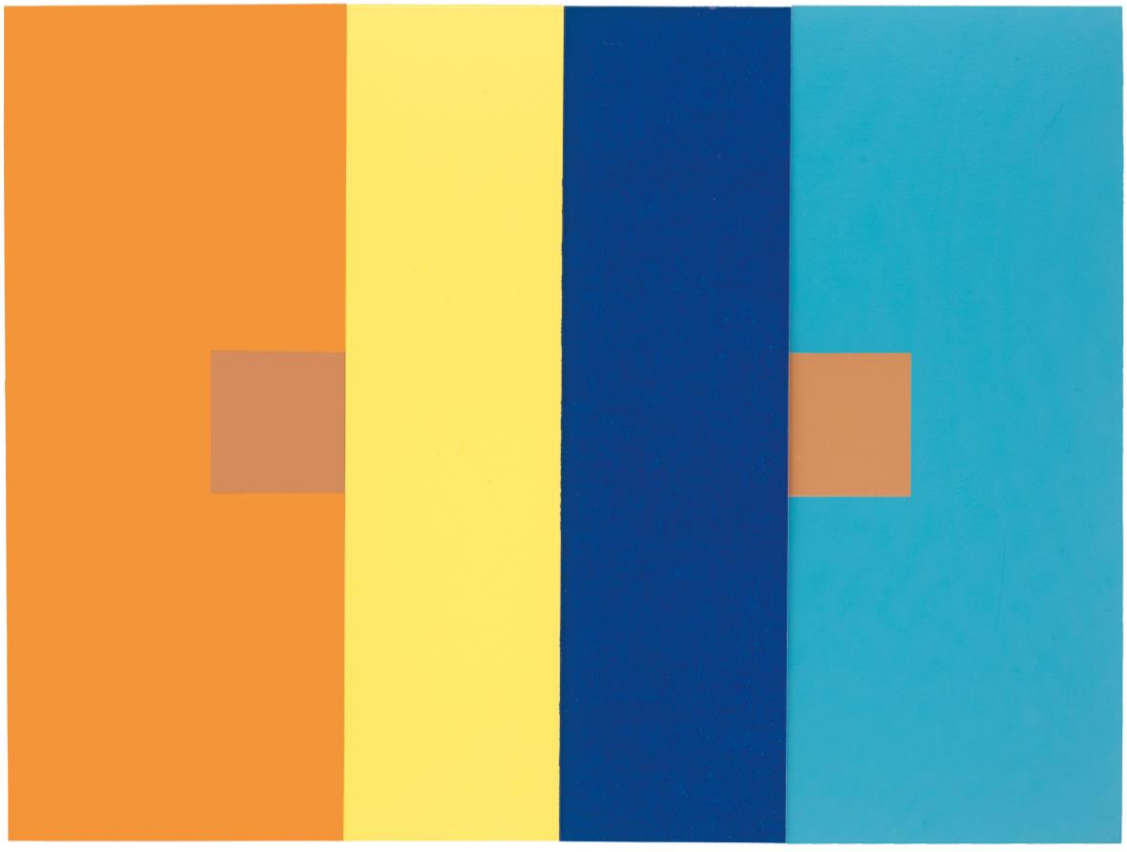

Figure 3: Plate IV-1b from Josef Albers, Interaction of Color. New Haven and London: Yale University Press, 1963. © Yale University Press.

León García Garagarza's fascinating reconstruction of the eschatological cosmovision of the sixteenth-century Indigenous ritual practitioner Juan Teton builds on the recognition that "in Mesoamerica the notion of personhood (Maya: *vinik*) is relational" [44 p.34]. Taking the earlier

scholarship of John Monaghan on the porous boundaries between human, animal, and divine personhood in Mesoamerican ontologies as his point of departure [45], Garagarza notes that "many Mesoamerican languages apply indistinctively the same word for person to both humans and animals" [44 p.35]. Garagarza draws on documentary evidence to propose that Juan Teton was a *nahualli*, a ritual practitioner capable of shape-shifting into their animal co-essence, or *nawal*, a Nahuatl term that has also been adopted by contemporary K'iche' Maya [see 11 p.326]. The individual's connection to an animal double is explained by their shared *tonalli*, one of three vital essences comprising the tripartite Nahua "soul" that is also attributed to other-than-human entities, including animals, plants and mountains [see 44 pp.35, 45, 54n13, 58n50, 11 p.326]. Where ordinary individuals can only access their animal co-essence in dreams, *nahualli* can do so through ritual techniques [see 44 p.35].

Historically, the jaguar occupied a privileged position in this relational folk biology (see Bassett [6 p.147]. Building on Garagarza's insights, Bassett proposes a perspectivist reading of Nahua conceptions of jaguars and other feline *tecuanimeh*, or "people eaters," as reflected in cultural objects such as the sixteenth-century *Florentine Codex*: "Aztecs called these animals by the same name," Bassett writes, "because they looked and acted alike from a human perspective, that is from the perspective of someone about to be eaten" [6 p.149]. I will return to the significance of jaguars to the persepctivist dynamics of Mesoamerican material culture in my discussion of Nahua conceptions of painting as a form of covering that functions as a substitute skin, below.

Comprehending the shared personhood of human and nonhuman subjects in multinatural cosmologies, Viveiros de Castro clarifies, necessitates that one distinguish "between the human species and the human condition" [3 p.472]. The later notion licenses the non-substantialist humanity attributed to animals and other-than-human persons within a perspectivist worldview, wherein bodies are irreducible to physiology, but must instead be differentiated according to their unique affects and capacities. This anti-foundationalist conception of bodies is, Viveiros de Castro notes, connected with the performative character of "interspecific metamorphosis" and shamanic mediation in ontological perspectivism [3 p.481]. As fellow anthropologist Philippe Descola observes, "everyone can undergo a metamorphosis in certain circumstances" within this framework [46 p.24]. That is, any subject can potentially assume the characteristic shape and associated bundle of affects and capacities of another category of person. As such, bodies operate as "sites of perspective" that can be activated by a diversity of subjects [3 p.481].

Ordinarily, the interior human form concealed by the manifest "envelope" of each non-human species is visible only to members of the same animal species or to shamans [3 p.471]. This corporeal envelope is conceptualised as a form of "clothing" [3 p.471], which can be ritually donned by ritual practitioners to assume animal form. As Viveiros de Castro clarifies, such animal clothes are not mere disguises or masks, but ontological "equipment, endowed with the affects and capacities which define each animal" [3 p.482]. It is this "bodily schema" [3 p.471], as Viveiros de Castro also refers to the cloaked humanity of non-human subjects, that resembles the performative materiality of colour in Albers's experimental practice. Like the "schemata of perception and action" activated by shamanic ritual [3 p.477], the oscillating, metamorphic quality of Albers's colour is irreducible to quantitative description. It behaves, rather, like the transspecific bundle of affects and capacities that characterise bodily schemas in shamanic perspectivism, which exceed substantialist frames. As such, Albers's approach to colour strongly recalls key dimensions of historical Mesoamerican visual culture.

Bassett builds on Viveiros de Castro's presentation of the metamorphic capacity of coverings to elaborate the material and phenomenological significance of the jaguar or ocelot's coloured pelt [see 6 p.151n56], which the Nahua contributors to the encyclopedic *Florentine Codex* described as *Cuihcuiltic*,

or "something painted" [47 p.72, see also 18 p.2].[5] Bassett observes that jaguars and other speckled, people-eating felines played a key role in Nahua military and ritual practices: "Aztec deities and rulers wore ocelotl capes, breechcloths, caps, skirts, and sandals. They sat on ocelotl mats and cushions. Ocelotl skins and goods were the properties of rulers, warriors, and diviners" [6 p.149]. Ritual specialists known as diviners (*tlaciuhqueh*) similarly wore ocelotl or jaguar hides, while priests reportedly carried incense bags painted to resemble the ocelot's varicoloured pelt [6 p.149]. This imitation patterning effectively transformed these painted surfaces into substitute skins that functioned as powerful sites for transspecific shifts in perspective.

Magaloni Kerpel elaborates the ontological significance of the Nahua concept of *ixiptlah* as a painted "substitute" for the deity that it represents [7 p.52], which operates as a symbolic covering akin to a point of view. Comprising the morphemes *ix*[*tli*], meaning "eye" or "face," and *xipehua*, "to flay," Magaloni Kerpel observes that *ixiptlah* are "associated with the flayed skin of animals or war captives worn by warriors, priests, and kings as a symbol of having acquired more power and multiple identities" [19 p.12]. Explicitly adapting Viveiros de Castro's account of bodies as clothing, Magaloni Kerpel concludes that "some paintings could be understood as *ixiptlah*—a covering with a specific form, illuminated with colors, something that possesses eyes and therefore a point of view—and thus be regarded as activated subjects, not objects" [19 p.13]. Nahua painting traditions were thus bound up with perspectivist phenomenologies premised on the transspecific substitution of points of view through exchanges of real or symbolic bodily coverings.

Relatedly, Magaloni Kerpel discusses the polar classification of pigments by Nahua painters (*tlacuiloque*), which distinguishes between colours obtained from animals and vegetables nourished by the sun from those with subterranean mineral origins [see 7 p.154]. While Magaloni Kerpel perceptively observes that this binary categorisation of colour mirrored the material composition of the Nahua cosmos, its dualist schema is also recognisable as a metonym of "the interchangeable perspectives of hunter and prey between the human and the jaguar" identified by Bassett in her insightful reading of the perspectivist folk biology that informed Book 11 of the *Florentine Codex* prepared by the Franciscan friar Bernardino de Sahagún and a team of Nahua elders, or *tlamatinime* [6 p.149].[6] Magaloni Kerpel persuasively argues that these wise men navigated their participation in Sahagún's fraught aggregation of Indigenous data on behalf of the colonial church to ensure the survival of Nahua painting traditions [see 7 p.161]. These included a perception of the medium itself as a ritual "unfolding" of images received from the otherworld resembling the vocalisation of shamanic chants [7 p.154].

Magaloni Kerpel's meticulous attention to the material and technical dimensions of Nahua painting traditions is aligned with recent scholarship on Mesoamerican ontologies of "making" in which life itself is perceived as an "interrelation between technical processes and vital processes" requiring the synchronisation of human and nonhuman agents [20 p.96; see also 11 p.325]. Albers's comments demonstrate an intuitive grasp of the consequential nature of this foregrounding of technique in the Indigenous visual cultures of Mesoamerica that he explored. Quoting Albers, Díaz observes that, contrary to the mimetic drive of Western sculpture, "pre-Columbian art keeps 'clay clay-like,' building 'cake-like flat elements or little globular or sausage-like forms'" [5 p.23]. This unresolved tension between the representational *appearance* and the formal *capacities* of materials in Mesoamerican ceramics notably mirrors Albers's own split treatment of materiality in his celebrated Preliminary

[5] Pitarch observes that the spotted owl, "jaguar-bird" and "jaguar-butterfly" were all considered to participate in the same class of "painted," nocturnal beings as their feline namesakes due to their similarly spotted coverings [67 p.85].

[6] A perspectivist reading of the binary—solar and mineral—classification of Nahua pigments observed by Magaloni Kerpel is consistent with the perspectivist interplay of aerial animikiig (thunderbirds) and subsurface mishibizhiig (underwater panthers) representing the "polar opposites" of Anishinaabe cosmology and visual culture, according to Corbiere and Migwans [68 p.37].

Course, which he divided into *matière* (the apparent qualities of materials) and *material studies* (their immanent properties) [see 5 p.22]. Albers's interest in the fallibility of perception, which animated this structuring tension in his pedagogy and art, is misconstrued, however, as a "discrepancy between optical trickery … and material reality" [5 p.27]. In Albers's frame of reference, colour does not simply disguise an objective facticity—whether optical, physical, or physiological. Rather, I want to propose that the artist's longstanding study of pre-Columbian art encouraged a conception of materiality and its transitive appearance that is congruent with the transspecific *body* of perspectivism; namely, as "a bundle of affects and capacities" endowed with transformational potential [3 p. 478]. Magaloni Kerpel has demonstrated the relevance of such a perspectivist framework to Nahua painting traditions, which she likens to the "'*cuerpo-presencia*' (body-presence)" of powerful images known as *ixiptlah* [Pitarch quoted in 7 p.153].

Albers's pedagogical ambition "to open eyes" is strongly reminiscent of the traditional ritual practitioners' capacity "to assume other perspectives" [quoted 5 p.15, 48 p.107]. Whereas Viveiros de Castro reserves this perceptual power for what might be termed "professional" shamans, Sean Desjardins proposes that shamanism was also an "important but prosaic skill" that could be applied by non-shamans in everyday contexts, from hunting to sewing [48 p.106]. Focusing on Inuit hunter-gatherers, Desjardins distinguishes between strong and weak forms of shamanism. If the latter characterises the professional shaman's wide-reaching influence over non-human beings, the more limited powers associated with its weaker manifestations could be exercised by non-shamans to ensure the successful execution of mundane tasks. It is the latter, non-ceremonial version of shamanism as a prosaic form of material practice that Albers's colour explorations approximate. In the Mesoamerican context, such mundane applications of shamanism discover an equivalent in the pragmatic employment of ritual techniques for "making" and sustaining life in everyday milieux discussed by Pitrou [20]. Like the material techniques studied by Desjardins and Pitrou, Albers's chromatic experiments reveal the latent behavioural capacities of colour through shifts in perspective.

Colour as deixis

Albers's relational approach to colour is consistent with the pronomial character of Indigenous design elements such as the step-fret, whose formal polarities embody the intersubjective dynamics of perspectivism, in which predator and prey occupy reversible positions of trans-species personhood. As such, colour operates within Albers's practice in a manner that simultaneously corresponds to the function of the "shifter" as it is was in the process of being formulated by Continental linguists in the years preceding Albers's first Mexican-inspired works. The concept of the shifter was initially proposed by Danish linguist Otto Jespersen in 1923 to describe grammatical elements such as personal pronouns, whose referents are situationally dependent [see 49]. Bridging Jespersen's introduction of the shifter in the 1920s and the publication of Roman Jakobson's influential *Shifters, Verbal Categories, and the Russian Verb* [50], the work of Austrian psychologist Karl Bühler (1879-1963) on the broader field of semiological *deixis*, or indexical pointing, presents clear parallels with Albers's contextual and pronomial explorations of chromatic phenomena. Where Albers wrote in *Interaction of Color* that "one and the same colour can perform many different roles" [42 p.20], Bühler had described the deictic contingency of the first-person singular pronoun in similar terms, writing that "everyone can say *I* and everyone who says it indicates a different object from everyone else" [51 p.119]. Albers ascribed this pronomial contingency of chromatic phenomena to the irreducible sociality of colour, to the fact that

"colors present themselves in continuous flux, constantly related to changing neighbors and changing conditions" [42, p.5].

Although Bühler's 1934 masterwork, *Sprachtheorie*, was only translated into English in the 1990s, he was affiliated with members of the Viennese Circle whose influential presence at the Bauhaus under the successive directorships of Walter Gropius and Hannes Meyer has been meticulously documented by Peter Galison [52]. Galison identifies a parallelism between, on the one hand, the logical positivism espoused by Rudolf Carnap and the rational approach to social housing championed by Otto Neurath, and, on the other hand, the functionalist architecture upheld by Gropius and Meyer alike as a paradigm for the rationalisation of art and design curricula. "The modernist construction of form out of elemental geometric shapes and colors," writes Galison [52 p.749], "is a correlate of the verbal development of theories out of logic and elementary bits of perception." Extending this recognition of the linguistic imprint of Vienna Circle thinkers on the visual vocabulary of Bauhaus practitioners, Gottfried Boehm [see 53 p.328] has likened Paul Klee's schematisation of the subject's motile potentialities to Bühler's theorisation of the *Origo*, or "actual speech situation" [54 p.xviii]. In particular, Boehm likens Klee's influential descriptions of the "active point" wielded by the visual artist to Bühler's pronomial "I," as the *Origo*-like center of a coordinate system of "directions of orientation" [53, pp.327-328].

As Danilowitz observes, it is notable that Klee was one of the few contemporaries to whom the stanchly independent Albers looked as a model [see 23 p.93]. Whether Albers ever read or encountered Bühler directly, then, it is likely that the artist absorbed the broad strokes of his linguistic *organon* via his careful study of the Vienna Circle-imbued art and pedagogy of Klee. Characteristically, however, Albers's approach to the shifter-like condition of colour was transformative. If Klee's ego-centered spatial organisation strongly recalls the coordinate system constructed by Bühler's semiological subject, Albers's interactive use of colour was always firmly situated in the scene of encounter between multiple agents. The resulting intersubjectivity of Albers's colour interactions is consequently closer to Bühler's likening of the *Origo* to the speech generated by "partners in an exchange" than to Klee's privileging of a kinesthetic "I" [51 p.37].

This distinction between Klee's representations of bodily orientation and Albers's explorations of intersubjective colour neatly corresponds to Bühler's two-tiered semiological system, which comprises deixis (pointing) and anaphora (symbolic reference). Bühler's study of language accords an unprecedented primacy to the deictic field, identifying acts of pointing and signposting as the bases of human language. Indeed, the symbolic referentiality of anaphora is but a specialised instance of deixis in Bühler's formulation. Just as situational factors shape speakers' interpretation of deictic particles such as *here* and *there*, for Bühler pronouns function "to distribute the roles in the speech action" in a fashion that is contextually dependent: "the 'I' and 'thou,'" Bühler writes, "jumps from one interlocutor to the other with the exchange of the roles of sender and receiver" [51 pp.130, 94]. Bühler proposes that speakers organise such pronomial references in analogy to the optical signs that subtend directional forms of deixis; in effect, delineating the vector of a grammatical "gaze" [51 p.138]. As Abraham observes, each situated view on to the shared grammatical field is equivalent to "the category of 'Person'" [54 p.xxix], a formulation that is also strikingly congruent with the ubiquitous personhood of Indigenous perspectivism, and the trans-species field of relational points of view that it implies. Consistent with the cosmopolitical primacy of predation in Viveiros de Castro's account of perspectivism, Bühler likens the mutually reinforcing "gazes" of speakers engaged in dialogue to the deictic signals exchanged by hunters tracking a common quarry [51 p.121]. Bühler also directly discusses Indigenous deictic systems of the Americas [see 51 pp.147, 163-168].

The findings of Robert E. MacLaury's Mesoamerican Color Survey (MCS) amplify Bühler's early research on Indigenous deixis. Interviewing 900 speakers representing 116 distinct Mesoamerican

languages and dialects, MacLaury collected data on Indigenous colour categorisation conventions utilising replicable Munsell colour samples for reference [see 8 p.xvii]. MacLaury observes that, with only minor semantic variation across linguistic communities, "Mesoamerican languages categorise two or three pure colors under a single name" [8 p.xviii]. He theorises that such categories represent "two views" onto coextensive colour ranges [8 p.109]. His Vantage Theory proposes that for Mesoamerican speakers, "a color category is constructed as an analogy to a point of view in physical space and time; people accomplish change in category organisation and its semantics by the same method through which they adjust a spatiotemporal vantage" [8 p.xviii]. MacLaury's empirically-supported hypothesis that the reciprocal stresses of overlapping Mesoamerican colour categories are constructed on analogy to the differential perspectives of topographically situated observers corroborates Bühler's early intuitions on Indigenous deixis and further contextualises the perspectivist reading of Mesoamerican visual culture that informs the present reassessment of Albers's mature colour pedagogy and art.

The evident convergence between Bühler's research on the sociality of signs and Albers's Indigenous-inflected exploration of colour interaction can be partly ascribed to Bühler's formative research on colour perception. Bühler completed his doctorate in medicine under the supervision of Johannes von Kries in 1903. Von Kries is chiefly remembered today for formalising the "duplicity" theory of vision, which posits the coexistence of two distinct modes of human visual perception: a chromatic "day" vision, dependent on cone receptors in the retina, and an achromatic "twilight" vision, for which rods serve as the anatomical substrate [see 55 p.110, 56 pp.35-36]. The bipartite structure of von Kries's duplicity theory was undoubtedly a compelling model for Bühler's subsequent two-field theory of language function, which divides semiological activity between deictic and symbolic modes of reference. It was, however, von Kries's work on subjective colour constancy—which facilitates the recognition of colours irrespective of variations in ambient illumination—that was most influential on Bühler's own work on colour vision [see 57].

Bühler's rich phenomenological descriptions of colour constancy—indebted to the experimental work of Ewald Hering—demonstrably influenced his subsequent language studies [see 58-59]. Indeed, Bühler explicitly ties his own field model of language to "development[s] in color theory with regard to the phenomenon of contrast" [51 p.xc], crediting Hering's distinction between an "inner field (*Infeld*)" and a "surrounding field (*Umfeld*)" of visual perception as the inspiration for his own two-field paradigm [51 p.xc]. Invoking the concentric rectangular fields of Hering's color-adaptation experiments—whose structure and subjective relativity also notably anticipate the format of Albers's *Homages*—Bühler wrote that "the deictic field is the core" [51 p.95], or inner field, of his language model. In common with Hering's colour-constancy tests, the practical exercises of Albers's *Interaction of Color* "demonstrate through color deception (illusion) the relativity and instability of color" [42 p.2]. Moreover, just as Hering's observations on colour constancy describe how perceived colour is contextually determined in relation to the entire visual field, and not according to the invariant values of physical wavelengths, Bühler proposes that "linguistic signs receive certain *field values* in 'everyday human contact' on being applied in the field of the speech situation" [51 p.99]. Applying this insight to the conventional meanings attributed to colours in a semiological system such as maritime flags, Bühler notes that those symbolic meanings are dependent on the "perceptible complex" of flag colours [51 p.83], and are consequently not reducible to independent chromatic values. Here "global symbolization" overrides any potential for semantic ambiguity reflective of local variations in perceived colour [51 p.83].

Bühler scholar Werner Abraham has discussed the potential for slippages between deictic and anaphoric registers to generate fluctuations in pronomial gendering in the German language, as both the feminine *die* and the neuter *das* may be grammatically appropriate pronouns with which to denote female subjects, depending on the intended mode of reference [see 54 p.xxii]. Abraham's observations

on the situational fluidity of gender pronouns demonstrate the complementary and mutually reinforcing relationship between Bühler's insights on pronomial deixis and the relational personhood of Indigenous perspectivism as ambient influences on Albers's approach to colour.

Consistent with the trans-species perspectivism embodied by the Indigenous cultural belongings that were such an important inspiration to Albers's explorations of chromatic interactions, Bühler did not restrict his semiological investigations to human sign systems, but rather followed Jakob von Uexküll's biosemiotics in exploring the function of deixis in non-human organisms. Bühler proposed that "the signals produced in the animal community [are] … the highest and richest actualization and development of potentials contained in the psychophysical system of every acting living creature" [51 p.xciii]. As Bühler summarises, von Uexküll interprets biological signals as a combination of "'perceptual signs' (*Merkzeichen*) and 'effector' or 'operative signs' (*Wirkzeichen*)" [51 p.34]. The "soap bubble"-like perceptual and affective environments, or *umwelten* [60 p.5], constructed by organisms from these signs—and vividly illustrated by von Uexküll's *A Stroll through the Worlds of Animals and Men*—are congruent with the multinaturalism of Indigenous perspectivism as delineated by Viveiros de Castro. Rather than positing a singular Real of which each species' *umwelt* would be merely a partial or distorted representation, von Uexküll instead writes of the "fallacy" inherent in "belief in the existence of a single world, into which all living creatures are pigeonholed" [60 p.14]. Von Uexküll draws upon the discoveries of the new physics "to doubt the existence of a universe with a space that is valid for all beings" [60 p.14]. For the biosemiotician, colour exemplifies the organism's capacity to project perceptual signs in order to construct its unique spatial world: "The sensation 'blue,'" von Uexküll writes, "becomes the 'blueness' of the sky; the sensation 'green,' the 'greenness' of the lawn" [60 p.9]. Colour thus materialises the organism's distinct sensorial vantage onto a unique world—a proposition remarkably consistent with the assumptions of Indigenous perspectivism that informed the Prehispanic artworks so influential on Albers's chromatic investigations. An early reader of von Uexküll—whose *A Stroll through the Worlds of Animals and Men* was published in the same year as Sprachtheorie, which references it—Bühler would go on to study the systems of temporal and spatial orientation in nonhuman species after seeking refuge from the Nazis in the United States in 1940 [see 61 p.lxvii].

Conclusions

Extending an existing literature devoted to the excavation of Josef Albers's Prehispanic sources, this article has explored specific correspondences between the artist's influential investigations of colour interaction and the perspectivism characteristic of Indigenous ontologies and arts of the Americas. Parallels between Albers's relational approach to colour and the metamorphic ontology of Indigenous perspectivism attest to the artist's intensive, though non-theoretical study of Prehispanic art forms, of which he amassed a significant collection in collaboration with his wife, the artist Anni Albers. In particular, the "shifter"-like character of Josef Albers's context-dependent employments of colour coincides with the reciprocal vantages of hunter and prey in Indigenous perspectivism, whose common personhood is conjugated by their belonging to distinct worlds. Albers's revelation of the variable capacities of colour through subtle contextual shifts in vantage resembles prosaic applications of shamanism practiced in multinatural Indigenous societies.

The pronomial status of colour in Albers's canvases and pedagogical experiments also reveals a marked resemblance to the pioneering analyses of Karl Bühler on deixis in human and animal sign systems. The latter grew out of Bühler's prior research on colour perception, and developed in a milieu with numerous links to the Bauhaus, where Albers taught prior to accepting a position with Black

Mountain College in 1933. The semiotic character of Albers's Bühler-like, but probably Klee-derived, approach to the relational indeterminacy of colour is strikingly similar to the semiotic character of Peruvian weaving, from which Anni and Josef both derived important lessons regarding the pronomial character of colour in art [see 35 pp.67-68]. The intellectual network retraced here thus describes a transversal arc of semiotic explorations of colour phenomena spanning the Indigenous Americas, interwar Germany, and mid-century America. The insights into the phenomenological dynamics of Indigenous art that Albers intuitively gleaned from his careful study of the Mesoamerican artworks in his collection testifies to the intercultural character of his chromatic investigations, which—like the radical anthropology of Viveiros de Castro—amounted to a complex "coproduc[tion]" with his Indigenous interlocutors [4 p.41], rather than independent discoveries or appropriations (Figure 4).

Figure 4: Lee Boltin, Josef Albers holding a West Mexican figure in front of Homage to the Square: Auriferous*, 1958. Gelatin silver print, 7 1/4 x 9 1/4 in. (18.4 x 23.4 cm). Courtesy of the Josef and Anni Albers Foundation.*

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