

JOURNAL > SITE 0: CASTALIA, THE GAME OF ENDS AND MEANS | 2016

# Castalia, the Game of Ends and Means

## Glass Bead

The first issue of this journal, as well as *Glass Bead*'s project at large, is directed towards rethinking art as a mode of rational thought. This engagement stems from a shared discontent with art's ongoing exclusion from reason, its positioning at the peripheries of knowledge, and its resulting political inconsequentiality. Our project departs from the assumption that any claim concerning the efficacy of art—its capacity, beyond either its representational function or its affectivity, to make changes in the way we think of the world and act on it—first demands a renewed understanding of reason itself. It might come as a surprise to our readers that while it is an art journal, *Glass Bead* offers no critical reviews, no art-historical texts on specific works, artists, or exhibitions. None of the discursive practices that commonly surround and legitimize art are present in this journal. This absence is determined by *Glass Bead*'s methodological decision not to address art from a pre-constituted identity, but rather to dynamically define its role through the exploration of other forms of reasoning (science, philosophy, politics, art, etc.).

While it foregrounds transits between disciplines, *Glass Bead* is not an interdisciplinary journal. In all its scholarly enthusiasm and benevolence, interdisciplinarity has now become some kind of empty motto. Starting from already constituted disciplinary identities, interdisciplinarity seeks connections whose broader impact on the forms of knowledge they connect are consequently silenced. As such, it appears unable to move beyond the implicit equivalence posited between the things it connects. By emphasizing direct, local connections, it proves particularly inadequate for addressing the hierarchal organization of the global structure of knowledge on which it rests.

Whereas interdisciplinarity seeks connections between fields of knowledge whose identity it ultimately leaves intact, our point of departure is rather that of a fully plastic and generic space of thought—a continuum of heterogeneous reasoning gestures, binding abstractions, and concrete determinations in a game of ends and means. From this point of view, a discipline can be understood as the particular and local instantiation of a group of conventionally constrained gestures operating within this continuum. It is only by recognizing the constitutive dynamics and differences between these diverse groups of gestures (i.e., the way each discipline unfolds its structural specificity through the generic space of thought) that artistic practices can hope to navigate this space and to have any traction on the global structure of reason.

It is this project of intrinsic navigation that *Glass Bead* wishes to take on.

#### A Renewed Abstraction

Such an attempt is necessarily twofold. To rethink art's position within reason and its efficacy within the world demands an enlarged conception of what abstraction is and can do. This task first requires that we clearly distinguish abstraction as we intend it here from its common understanding within the context of art theory as a defined aesthetic (e.g., formalist abstraction, abstract expressionism). Neither a genre nor a specific domain of practice, abstraction must be understood as the generically constitutive activity through which humans come to define and transform themselves and the world.<sup>1</sup>

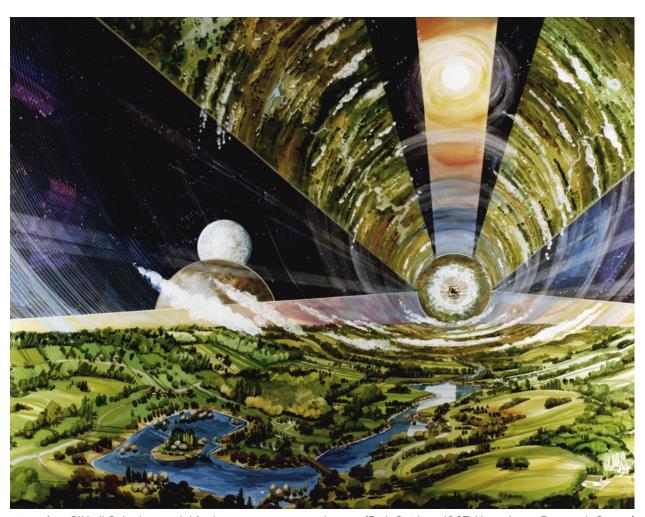
This widened approach to abstraction then calls for a renewed exploration of the function of art within the wider sphere of rational activity. Today, art's complex relation to abstraction can be schematically characterized by a general inclination towards a dynamics of retreat and seclusion. On a social and political level, there is a widespread tendency to oppose the systemic movements of the global economy by engaging with local particularities and seceding from these global movements of abstraction. In a society increasingly saturated with capitalistic vectors of abstraction, artistic and curatorial practices have attempted to safeguard aesthetics as an intuitively accessible common space surpassing all boundaries and overflowing all determinations. This immediacy also works on an epistemic level, where artistic production is seen as an alternative to the disembodied objectivities and overarching universals that modernity is criticized for having produced. Such a stand promotes a conception of art which, by way of a direct sensible relation to forms and materials, promises to rebind our knowledge with the alleged spontaneity of experience.

What these contemporary threads have in common is the idea that we can avoid the labor of abstraction by intuitively accessing the indeterminate expressive potential of the artwork. They are based on the shared belief that art, in its contemporary form and self-proclaimed epistemological and social immunity, can somehow be the guarantor of liberation from abstraction. Doing so, these threads implicitly promote a conception of freedom as that which is only achievable through the paradoxical coupling of flight and refuge. On the contrary, *Glass Bead*'s contention is that, in regards to abstraction, there can be no escape, no respite, no sanctuary<sup>2</sup>. No spontaneous knowledge can be reclaimed nor immediate social order be retrieved. To affirm the contrary is to fall prey to the yearning for an irreducible real, the inexhaustible search and delayed promise of a lost kernel of freedom. Obsessed with its own agency, contemporary art tends to embrace this myth, therefore misapprehending the very space of its operations and further intensifying its epistemic and political inefficacy.

The distinction between the abstract and concrete can neither be posed as a rigid separation nor as a fluid mixture. On the contrary, the dialectical interpenetration of the terms requires an ongoing process of elaboration, redefinition, and exploration of the ways in which they are co-articulated. Making a move on the concrete ground always presupposes simultaneously stepping on the abstract plane that enables this movement. A simple act such as aiming at a destination and moving towards it implies both the physical trajectory of a body through space and the mental unfolding of a "line without thickness,"<sup>3</sup> without any correspondence whatsoever with the materiality of its terrain. Although it lies outside of the world and no sensible access to it is possible, this abstract line serves as a guide for the spatial organization of behavior. Any level of rational engagement with the world, being either physical, social, or conceptual entails a capacity for making complex mediations binding the concrete and the abstract. This capacity is inferential: it proceeds by and through reason<sup>4</sup>. Just as there is no navigation through a territory which is not to some degree correlated to a map, there can be no social organization or knowledge of the world without this dynamic entanglement. Likewise, just as any form of knowledge requires an articulation between the particular and the general, the construction of a common political horizon cannot be reduced to the immediacy of interpersonal relations. It necessarily involves the constitution of an abstract community: a movement of oscillation between the specificity of individual links and the global coherence of their mode of connexity.

The space opened by the dynamical binding of the abstract and the concrete is therefore an inferential space. It is a space modulated by the very gestures which enable it and constitute its fiber. All human activity to some degree or another pertains to this space. No one, including artists, can claim secession from such a space. Art, like any other practice, is embedded in this fabric of gestures. This is why any ambition to consider the role that art can play today, either in social or in epistemic realms, must first unfold as an operation on the very structure of the space of reasoning gestures.

Questions about the efficacy of art thus become spatial questions: How can we operate transformations on a space in which we are immersed? How can art participate in these transformations after having contested its exceptional position? How can these transformations be enacted without calling to any meta-gesture?



View of an O'Neill Cylinder, model for long term space settlement (Rick Guidice, 1967, Nasa Ames Research Center)

## The Space of the Game

To explore these questions requires first locating the institution of art and its historical constitution within this space. This localization entails, on the one hand, regionalizing art as a local modality of the wider, generic space of thought and, on the other hand, affirming art as a practice of abstraction and navigation between increasingly specialized yet overlapping domains of thought.

Historically understood, the constitution of the contemporary space of art can be read as a series of determinate negations that both transformed its ontology and instituted powerful forms of social critique. However this trajectory has also bound itself to a process of self-inflicted confinement and institutionalized myopia. Throughout modernist art theory, aesthetics can be said to have produced a constant mirroring between the "figure" of the modern subject and the "background" provided by a unified concept of nature.<sup>5</sup> As such, the space of art, from its modern inception as aesthetics, can be understood as both a negation and a reaction to the manifold scales of abstraction that modernity introduced in the world: the increasing scientific objectification of nature by Enlightenment rationality, the technological externalization of experience brought about by mechanical reproduction, the division of labor and the fragmentation of social life provoked by the advancing front of capitalist modernization. Operating at the margins of this rationalization of experience, and at the borders of the technological and social engineering of the modern psyche, aesthetics instilled forms of perceptual synthesis in the chains of mediation that modernity produced between the subject and the world. Doing so, it occupied a paradoxically central and extra-territorial place in the topos of modern rationality: from the Romantic sublime to modernism's transgressive ethos, art has been considered in excess and in exception to these rational operations, conceived as the reflexive tool for the production of openings outside rationality and conceptual production.

This conception of aesthetics as a bastion of immediacy standing up to the rationalization of experience has led art, in its most symptomatic contemporary form, to picture itself as a space of production of affects intractable to scientific thought, and receding into the ineffable. Contemporary art generally carries this critical project by foregrounding an endless play of indeterminate signification that consigns the function of the artwork to the generation of a meaning safeguarded from its evacuation by rational explanation. It puts forward an understanding of creativity and freedom as that which can only be achieved by escaping a rationality it pictures as reductionistic,

'scientistic,' and suffused with the unconscious forces of class and libido. Doing so, it paradoxically projects the different scales of abstraction inherent to rationality into the background, as an implicit condition with which it becomes impossible to engage. Contemporary art, on the one hand, tends to counter its instrumental or functional reduction to means by foregrounding the unpredictability of its materials, its openness to different outcomes, and its multi-perspectival social inclusiveness—all of which is condensed in the institutionalized formula known as relational aesthetics. On the other hand, it opposes any reduction to ends by affirming indeterminate play, affective uncertainty, and semantic ambiguity. In constructing an image of freedom based on the irreducibility of creative expression to both ends and means, it tends to lose the capacity for engaging in the revisionary-constructive elaboration of freedom. In excluding itself from all forms of practical or theoretical reasoning, art is condemned to oscillate between an illustrative function reflective of and subordinate to knowledge, and an ineffable expressive capacity that is irreducible to any rational measurement, explanation, or instrumental use. Far from having fully acknowledged the bankruptcy of the conceptual framework of modernism, contemporary art has universalized it, projecting it into a transnational utopia of free market fluidity. As such, the contemporary "expanded field" (Rosalind Krauss) of art merely performs, semantically and materially, the neoliberal crisis: it is obsessed with escape, but knows of no outside; it insists on its agency in the world, but disavows any direct causal, logic, or pragmatic impact on it.

*Glass Bead* contends that this picture of the space of art (its long history of ontological catastrophes and its present epochal deadlock) rests upon a misdiagnosis of the relation between cultural production and rationality.<sup>7</sup> The fact that scientific rationality and technological abstractions destabilize and transform our

default—manifest—apprehension of the world must be understood as the starting point for the artistic enterprise, rather than as a cognitive and political pathology that art should remedy. As much as art cannot simply be mobilized to cure dysfunctional forms of politics through social activism, nor can it simply be considered a social mediator between more specialized and less accessible fields of knowledge production (such as philosophy, physics, mathematics, climatology, geology, etc.).

Rather than considering that art can excavate an immediacy concealed by such specialized forms of knowledge, we understand artistic practices as modes of thought mediating forms of conceptual and material operations. Understood as operating within the rule-governed space of rationality, working at once through abstraction and material

contingencies, artistic practices cut across the abstract plane against which these specific forms of knowledge are designed and isolated, questioning their relative distribution, and therefore potentially destabilizing and transforming the ground on which they rest. Rethinking the relation that art entertains with abstraction therefore implies conceptualizing it as a site of experimentation for the mutual penetration and destabilization of thought and matter, making explicit and thus transforming both the static picture of their traditional opposition and their overly fluid mixture in contemporary critical theory. Claiming art as a site of operations on abstraction hence means mobilizing art as a technique of reorientation of thought, out of its candid intuitions of itself and headlong into the complex ramifications of its diverse engagements in the dynamics of political, epistemic, and sociocultural formations<sup>9</sup>.

## A Model for Navigation

While this entails considering that art is as much a part of reason as other fields of thought such as science and philosophy, it does not mean that these disciplinary divisions can be forced into false equality <sup>10</sup>. In order to understand both the differences and the unity of these modes of reason it is necessary to acknowledge the immanence of the activity of modeling to thought. A model is an abstraction that intervenes in the reciprocal development of means and ends. There is no intelligence without modeling and abstraction. Only the automaton exists in the concrete immediacy of the world. For logic-using agents, playing the game of ends and means is not a choice but a necessity. We either passively accept models, by organizing ends and means according to their implicit rules and their often brutal abstractions, or, by making their rules explicit and revealing the form of their abstractions, we can actively question models, transforming ends and means in the process.

A fundamental characteristic of the model, and of intelligence in general, is the spatial organization of possibilities. All knowledge presupposes a gestural level of constitution, a movement by which the concrete is perturbed by an abstract line. This gesture of abstraction at once reduces the world by a ruthless act of disregard, and at the same time augments it by introducing new possibilities, transforming the available means and generating unprecedented ends. However, although modeling is a rational procedure of abstraction at every level of sapient interaction, the different ways in which science, philosophy, and art relate to this activity need to be distinguished.

Scientific theories model nature; they refer to an aspect of the world and are subject to experimental validation or logical argumentation on this basis. Though it may represent or refer to some aspect of the world, a work of art, by contrast, also constructs a world. In this it is fundamentally self-referential. It refers to the act of reference; it models the activity of modeling. In that sense, it is different from scientific reasoning. Scientific reasoning is naturalistic; it is true or false depending on what is or is not the case. Artistic reasoning is a properly normative activity defined by the discursive pertinence of its imaginative construction. It projects a could or a should, an ought to be that is irreducible to any naturalistic determination of what is. Yet, this does not mean that science is purely descriptive while art is purely prescriptive. Scientific models are also constructive—they are not passive, neutral, or static with regard to their object. A model orients activity and may have performative or counter-performative effects on the world it describes. A model, such as that picture of the world implied by a scientific theorem, is a structurally constrained system or instrument defined by the functionally constrained purposes it serves, a reciprocal coordination of means and ends that alters the world it pictures<sup>11</sup>.

Science makes means subordinate to ends (for example when it states that the function of life is reproduction), while contemporary art is allergic to any singular imposition of ends (it refuses any reduction to a single purpose). However, if a scientific model allows for an object within the world to be grasped, an artwork, like a philosophical argument, has the capacity to grasp the act of grasping itself. It is all too easy to see this in meta-theoretical terms, by subordinating these heterogeneous forms of thought to a master narrative, such as the Platonic conception of philosophy or the Romantic conception of art. However, in constructing a world, a work of art functions as a device for navigation in this world, as a technology for the production of spatial and temporal syntheses, and is thus a crucial facilitator for the creative organization of behavior. Glass Bead thus foregrounds art as a local site of abstraction within the global space of thought—a site from which one can not only map but navigate different scales of complexity, a site from which thought can mobilize itself for its self-transformation both at the global level (its general cognitive scaffolding) and the local level (its specific conceptual and disciplinary domains, art being one of them). In such a conception, art becomes a specific yet generalized mode of navigation across diverse fields, especially equipped for the construction of knowledge syntheses. Such syntheses therefore imply going beyond the simple connections that could be made between them, be they thematically, methodologically, or performatively articulated. To consider art practices as modes of navigation involves acknowledging that any mediation between distinct fields also alters the global structure of the space in which it happens. To navigate hence does not only mean to connect different things, but to address the dynamic type of space that such navigation constructs<sup>12</sup>. Considered in these terms, the question of knowledge syntheses becomes both an epistemic and a political issue, since the spatial models according to which such syntheses can be constructed are not simply determining what is possible to know, but also what it is possible to do.

### Topos, Site, Transfers

Following such a spatial account, navigation and knowledge synthesis can be conceived as procedures pertaining to dialectical articulations between, on the one hand, local and specific operations, and, on the other hand, global and generic models according to which these operations can be extended<sup>13</sup>. Yet, such procedures remain to be constructed. In historical terms, we are left with two inherited models of spatial organization which, in our view, are equally inadequate to produce such syntheses. While modern universalism worked as a global projection superseding localities that were not considered able to alter its global structure, the postmodern critique of universalism foregrounded relative trajectories that, working from one locality to another within that structure, have been considered to prevail over any global system. By either forcefully projecting the global onto the local, or rather excavating the local regardless of its relation to any global structure, these two opposed spatial models remain relatively unable to achieve any articulation between these dimensions.

Aiming to move beyond these insufficient spatial models, each issue of the journal is dedicated to the exploration of a *site*<sup>14</sup>. A core concept of *Glass Bead*'s methodology, the notion of site is defined in broad terms. Designating a geopolitical locality as well as a conceptual territory, a fictional entity, a musical expression, or a material formation, a site indexes for us at once an area or a region situated at the intersection of different forms of knowledge, as well as its aesthetic, political, and conceptual stratifications. Far from reducing the site to a topographic point in the space of knowledge, the journal aims to unfold it as the spatialization of a dynamic epistemic figure that cannot be understood through extrinsic determinations alone, but rather through an intrinsic mode of navigation and orientation<sup>15</sup>. The sites that the journal will explore can thus be seen as instruments for the transformation of the epistemic conditions in which they operate. For us, these sites act as vehicles for travelling across multiple disciplinary regions and scales of abstractions.

Although it draws on the way in which this concept has been framed in art theory since the 1960s, our conception departs from its close connection to both specific geographic places and calls to the situatedness of aesthetic experience. The anti-formalist discourses that promoted site-specificity supported the materialist critique of the autonomous artwork. But, as the concept of site has been increasingly identified with an enclosed, absolutely specific locality, it has now become a political and artistic deadlock. By reducing forms of knowledge to the identity of their local point of emission, the localist approach to sites fails to articulate their global ramifications.

Our approach to the concept of site takes its inspiration from contemporary mathematics, in which the concept of space has been radically enlarged. From Category theory to Topos theory, the recent history of the discipline has been marked by a generalization of geometry aiming to reintegrate and synthesize increasingly diverse and specified fields and practices. 16 Broadly put, this process has been that of a progressive and irreversible mutation: a double process of emancipation where geometry was progressively freed from the ascendency of direct experience, and where any external frame of reference was abandoned in favor of an ever more intrinsic apprehension of space. This historical mutation had two phases. First, through topology in the nineteenth century, where space was no longer simply understood for what it is in a given state but for what it can possibly become, and where notions of scale and measurement gave way to an emphasis on continuous transformations and on the limits of such transformations. Secondly, through Topos theory in the 1960s, where topology was extended and generalized to the epistemology of mathematics itself. Descending one step further in the intrinsic geometry, Topos theory conceived the diversity of mathematical theories as sites, understanding them as spatial entities possessing their own borders and continuities. By identifying invariants and possible translations among and across these sites, Topos theory can be said to have prolonged and completed the conceptual revolution initiated in the nineteenth century. In elaborating the mathematical notion of site, it thus opened to a conception of space that, rather than acting as a mere container, can be understood as forming itself through the dynamics of binding and transforming its modes of reasoning<sup>17</sup>.

This does not mean, however, that such mathematical theories should be seen as ready-made models that it would suffice to import into other conceptual domains. We do not advocate a literal application of mathematical models to art, but neither do we mobilize them as mere metaphors. Rather, by mobilizing the concept of site as a vehicle

allowing for the binding and transformation of diverse modes of reasoning, our relation to contemporary mathematics is marked by a commitment to elaborate its project of dynamic synthesis and unification within the cultural realm.

#### Site 0: Castalia

The site on which this issue focuses is Castalia, the fictional province imagined by Hermann Hesse in *The Glass Bead Game* (1943). Set in Central Europe some five hundred years in the future, Castalia hosts a peculiar society entirely dedicated to the pursuit of pure knowledge. In this cloistered setting cut off from the world and its historical and political vicissitudes, the monastic inhabitants of Castalia, unencumbered by technological or economic concerns, are free to develop obscure objects of enquiry devoid of practical implications in the world. Hesse presents Castalia as an idealized vision of the modern university, encapsulating the humanist search for universal knowledge, in which the Game provides an aesthetic ground for the unification of ideas beyond disciplinary frontiers. The apex of this scholarly order is the mastery of a complex interdisciplinary game that synthesizes all forms of knowledge, in which musical motifs, philosophical propositions, and scientific formulae all occupy the same rarified epistemic space.

Mobilizing Castalia as an equivocal image, at once archetype of modern universalism and fortress delegitimized by its own enclosure 18, our aim in this issue is to revisit and transform the Castalian model for the unification of reason. Opening Castalia and its modernist locus to the widened conception of space engendered by contemporary mathematics provides the conditions for the reformulation of a truly dynamic and transformative game of synthesis. Our project here is not to rebuild the old foundationalist dream of a completed universal language, nor to reconduct the standard critique of rationality, but rather to construct the conditions for dynamic transits that can transform the milieu in which rationality operates. Exploring *Glass Bead*'s conceptual, political and methodological prerequisites, this site o lays the ground for our project at large. It gathers contributions exploring the very nature of the space of modern rationality figured by Castalia, as well as the ways in which the contradictions of this space can be outstripped. This issue is comprised of essays by, and interviews with, philosophers, mathematicians, artists, art historians, curators, anthropologists, and theorists exploring contemporary forms of thought that, while recognizing the diversity of contexts in which specific forms of knowledge are produced, aim to produce universal yet dynamic forms of syntheses between them.

Contrary to the glass bead game, in which the synthetic means at play are articulated to purely contemplative ends, our contention is that any synthetic game always implies a reciprocal articulation between ends and means. Implicitly based on the free play of ideas in a purified aesthetic realm, the game imagined by Hesse conceptualizes reason as an activity that can only be perfected according to its separation from social and political relations. This issue of the journal rather draws on the assertion that reason is primarily grounded in practical orientation, socially embedded in discursive and non-discursive practices as well as relatively formalized conceptual frameworks. *Site o: Castalia, the Game of Ends and Means* seeks to rearticulate the game of synthesis imagined by Hesse by modeling it as an intrinsic modulation of ends and means, therefore enlarging not only the space of knowledge, but also that of action.

Making a move in this game of ends and means is necessarily bound to a collective act of self-transformation. Playing this game entails committing to an ongoing process of construction and revision that continually changes its nature. It does not leave us intact as players by preserving what we are but involves us in a constant redefinition of what we can be and ought to be.

The editors want to thank all the contributors to this issue, as well as all the workshop participants and speakers that took part in this first year of research. Their work has been a crucial and general influence on our conception of this project and the writing of this editorial.

#### **Footnotes**

- 1. See the Audio Research Program, Reza Negarestani, What Philosophy Does to the Mind
- 2. See in this issue Laboria Cuboniks, "Xenofeminist Manifesto: A Politics for Alienation"
- 3. See in this issue Giuseppe Longo, "The Consequences of Philosophy"
- 4. See in this issue Ray Brassier, "Transcendental Logic and True Representings"
- 5. See in this issue Anselm Franke, "The Third House"
- 6. See in this issue Linda Henderson, "The Forgotten Meta-Realities of Modernism: *Die Uebersinnliche Welt* and the International Cultures of Science and Occultism"
- 7. See in this issue Amanda Beech, "Culture Without Mirrors—Restructuring Creative-Cognitive Power"
- 8. See in this issue Tristan Garcia, "The Photographic Real"
- 9. See in this issue Mat Dryhurst, Holly Herndon and Alex Williams, "Re-Engineering Hegemony"
- 10. See in this issue Gabriel Catren, "The Trans-Umweltic Express"
- 11. See in this issue Freeman Dyson, "The Way of the Pacific"
- 12. See in this issue Tarek Atoui, "Transformative Circuits"

- 13. See in this issue Martin Holbraad and Eduardo Viveiros de Castro, "Ideas of Savage Reason"
- 14. See in this issue Keller Easterling and Benedict Singleton, "Forging Rules"
- 15. See in this issue Deneb Kozikoski, "The Turn of the Canoe"
- 16. See in this issue Olivia Caramello, "The Theory of Topos-Theoretic Bridges: A Conceptual Introduction" and Andrée Ehresman & Mathias Béjean, "The Glass Bead Game Revisited: Weaving Emergent Dynamics with the MES methodology"
- 17. See in this issue Fernando Zalamea, "Multilayered Sites and Dynamic Logics for Transits between Art and Mathematics"
- 18. See in this issue Guerino Mazzola, "Melting Glass Beads: the Multiverse Game of Gestures and Strings" and Peter Wolfendale, "Castalian Games"

Glass Bead is an international research platform and journal. Glass Bead was conceived and is run by Fabien Giraud, Jeremy Lecomte, Vincent Normand, Ida Soulard and Inigo Wilkins.