On Idiomatics: A Call to Action, A Call for Action[1]

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ABSTRACT

Idiomatics—the scientific study of idiomatic language and figurative language—is a pervasive theme in global literature, yet its precise terminology often lacks clear definition. This article addresses this challenge directly by delving into the etymology, significance, and universality of idiomatics. It emphasizes the pivotal role of idiomatics in understanding human behavior and language development, stressing its interdisciplinary relevance. Advocating for idiomatics to gain recognition as a distinct academic discipline, the article calls for the establishment of clear boundaries and methodologies within academia. It concludes with a compelling appeal for collective action, urging idiomatists worldwide to unite under the imperative "Make it happen!" To this end, it presents ten strategic priorities that transcend geographical and linguistic divides, uniting researchers and language professionals in a common mission to advance idiomatics. These priorities underscore the urgency of addressing the current state of idiomatics and shaping its future trajectory, emphasizing the need for decisive action and collaboration. Through concerted efforts, the article seeks to propel idiomatics into new heights of understanding and application across diverse linguistic and cultural contexts, one priority at a time.

Introduction

For more than seven decades, linguists, etymologists, lexicologists, idiomatologists, and numerous first and second language researchers and teacher educators around the world have been defining, characterizing, and cataloging the 'peculiar' nature of human language across synchronic and diachronic timeframes. The research in second languages alone has yielded various competing hypotheses and models, including the *graded salience hypothesis* (Giora, 1997), the *idiom diffusion model* (Liontas, 2002a, 2015), the *dual idiom representation model* (Abel, 2003), and the *literal salience model* (Cieślicka, 2006), all with conflicting results, each striving to uncover and explain the processes by which literal and non-literal language is accessed, comprehended, retrieved, and produced in both context and non-contextual settings during human communication. Moon (1997) described the resulting nomenclature as follows: "There are many different forms of multi-word item, and the fields of lexicology and idiomatology have generated an unruly collection of names for them, with confusing results… Note that there is no generally agreed set of terms, definitions and categories in use" (p. 43).

Two decades later, Hinkel (2017) suggested that "What represents an idiom, a proverb, a conventionalized expression, or a grammatically irregular unit of language is notoriously—

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famously—difficult to define and hence to identify… analyses of language corpora have further added to the typological and terminological stew… (p. 46). In the following year, under the heading "Much Ado About the Idiomaticity Labyrinth," Liontas (2019) compiled a list of 73 terms denoting what is commonly understood as "lexemes of repeated structures exhibiting language peculiarities that defy expected rules of grammar and/or logic" (p. 58; see Table 1, pp. 59-62). He advocated for authoritative, definitive, and comprehensive descriptions and terminology (Liontas, 2019, p. 63) to mitigate the confusion and misuse of terms and associated concepts. In 2021, Liontas refined and expanded his earlier definition of *idiomaticity*—the study of idioms and idiomatic language—to a broader concept known as *idiomatics*:

> **Idiomatics:** The scientific study of *idiomatic* language and *figurative* language. Idiomatic language is the natural mode of expression and phrasing of a language, that is, language that uses, contains, or denotes peculiar or characteristic expressions, words, or phrases native speakers would routinely use and consider natural and correct. Figurative language is the extraordinary creative use of language that deviates from the conventional work order and plain meaning to suggest meaning rather than directly giving meaning, that is, any figure of speech that plays imaginatively with the meaning of words in order to build and furnish layers of meaning beyond the purely literal for particular descriptive effect. (p. 32, emphasis in the original; see also p. 3)

In recent works by Liontas (2021a, 2021b), the study of idiomatics emerged prominently; however, a focused examination of *idiomatics proper* remained peripheral. This article endeavors to address this gap directly through delineation in three principal sections.

The opening section—What is Idiomatics?—explores the etymology, significance, and universality of idiomatics. It briefly touches upon methodology and theory development in the pursuit of constructing a comprehensive theory of idiomatics. Concluding with "When Language Is Idiomatics," it elaborates on the characteristics and cultural implications of idiomatic-figurative language, and underscores the interdisciplinary importance of idiomatics for further investigation.

The subsequent section—The Road Ahead—advocates for a paradigm shift, stressing the imperative to recognize idiomatics as an independent academic discipline distinct from related fields. It asserts the importance of establishing clear disciplinary boundaries and methodological frameworks within academia, while urging robust global collaboration to steer its trajectory. Emphasizing the need to address challenges and systematically investigate idiomatic-figurative language, it underscores the call for decisive action.

The third and final section—Make it happen! A Call to Action, A Call for Action—serves as a compelling appeal, urging idiomatists worldwide to unite under the clarion call "Make it happen!" and propel the field of idiomatics forward through a comprehensive set of ten thematic priorities. This directive not only mobilizes collective action but also prompts reflection on the insights gained from scholarly experience, the inherent significance of the present moment, and the unwavering commitment to advancing scholarly and intellectual pursuits.

We begin with making the case for the field of idiomatics.

What Is *Idiomatics*?

The word 'idiomatics' is the plural form of 'idiomatic,' an adjective describing language that uses, contains, or denotes expressions natural to a native speaker. It pertains to the natural mode of expression in a language and refers to characteristics peculiar to a particular group, individual, or style. The term 'idiomatics' consists of 10 letters (a, c, d, i, i, i, m, o, s, t). It is derived from Late Latin 'idioma,' meaning 'language,' which in turn comes from Ancient Greek ἰδιωματικός (idiōmatikós), meaning 'related to an idiom.' This stems from ἰδίωμα (idíōma), referring to a peculiarity, property, or unique phraseology in language. The term originates from ἰδιοῦσθαι (idioûsthai), meaning 'to make one's own' or 'appropriate to oneself,' rooted in ἴδιος (ídios), meaning 'one's own' or 'peculiar.' The suffix '-istics' originates from English terms denoting a science or field of knowledge. Thus, 'idiomatics' combines the root 'idioma' with the suffix '-istics' to describe the study of language that is personal, peculiar, distinct, or unique to an individual or group (see also Liontas, 2019, pp. 55-56).

Etymologically so derived, *idiomatics* is the systematic study of human language communication or the process of exchanging messages and creating meaning beyond the literal or purely symbolic. Unlike linguistics, which primarily studies the building blocks of language—symbols, letters, and words with arbitrary meanings governed by rules and used for communication (Chomsky, 1965; Hockett, 1958; Katz & Postal, 1964; Wilkins, 1972)—idiomatics focuses on evolving modes of expression that are distinctly natural to native speakers. It also explores emblematic and symbolic figures of speech, in contrast to literal language. Simply defined, *idiomatics is the art and science of idiomatic language and figurative language* or *the systematic study of idiomatic and figurative language* (see also Liontas, 2021c, p. 3, 32).

As a field of study, *idiomatics proper* is characterized by its focus on science and idiomatic-figurative language. More specifically, it involves the systematic study of idiomatic and figurative language as integral aspects of human behavior and cognition. Idiomatics is a universal human phenomenon and a social phenomenon critical to human interaction. It is used by every speech community worldwide for communication. As a distinct form of human communication, idiomatics invites the study of the human brain and mind, as well as how language and thought are cognized and expressed (Gibbs, 1994, 1995). Moreover, idiomatics is a highly organized and dynamic phenomenon. It adheres to a set of codified language conventions, either conventionalized and institutionalized for productive use or created anew as a form of expression that must be "figured out" during social interaction.

Idiomatics, as a set of codes for communication within a speech community and as a form of expression generally conceived and articulated both idiomatically and figuratively, remains a language-based system. Through natural language development processes and experiences of trial-and-error, it influences and reinforces cultural norms and practices among speakers, writers, and signers of various speech communities in ever-evolving and dynamic contexts of real communication (Fernando, 1996).

The discipline or methodology of idiomatics arises from careful observations of natural language use, allowing for the formation and testing of hypotheses. These hypotheses lead to theories that can describe its varied qualities, explain the viability of observed phenomena, and predict the systematic patterning of form and meaning in specific real-life settings and pragmatic encounters requiring literal and figurative interpretations (see, for example, Lewis, 1993, 2000; Tomasello, 2003). Additionally, these theories should be logically falsifiable in the presence of sustained, disconfirming evidence that arises from the analysis itself. Identifying the form-meaning

patterns and developmental processes of cognition inherent in how users utilize idiomatic and figurative language within their native language and across similar or different languages is crucial for idiomatics theory building (Wray, 2017). This, in turn, supports the development of sound, applied solutions to significant issues or aspects. (For a critical discussion of the challenges posed by conflicting terms and criteria in language studies, especially regarding nomenclature resolution across various linguistic research domains, refer to Myles & Cordier, 2017.)

When Language Is Idiomatics

Language has long been established as a system of symbols or word sequences used to communicate ideas or feelings through conventionalized signs, sounds, gestures, or marks with understood meanings. In other words, language conveys information through symbols arranged according to systematic rules. As a symbolic system, language includes rules for combining sounds into meaning units, meaning units into words, and words into sentences, as well as rules for using the language. Words often combine and collocate with other words to produce conventionalized and institutionalized expressions of speech that can be as literal as they are figurative, depending on pre-text, local context, and evolving socio-pragmatic use (Libben & Titone, 2008; Lieven, 2006; Swan, 2006).

The genesis of such expressions, regardless of length, type, or currency, is not newly constructed each time a native speaker wishes to communicate ideas, emotions, and desires using sounds or gestures meaningfully arranged according to set rules. Native speakers can produce an infinite number of expressions and/or sentences using a limited set of rules and words, including those newly coined or borrowed from other languages. This ability allows them to either generate never-before-heard expressions or sentences through organizational rules and infinite generativity, or use ready-made expressions established through convention, institutionalization, or both (Cowie, 1998; Pawley & Syder, 1983).

Language may serve as the generative system for communicating words or signs that people use to express thoughts and feelings to each other, but idiomatics shifts the focus towards language that conveys meaning through idiomatic and figurative expressions. Differentiating between these two aspects of natural language use is essential for understanding idiomatics proper as a systematic means of communicating thoughts and feelings through speech sounds and gestures that extend beyond literal interpretation (Allen, 1995; Ibáñez et al., 2010).

In addition to language in the broadest sense, idiomatics is productively used to express our innermost thoughts and emotions, interpret complex and abstract ideas through creative figurative and symbolic language, and metaphorically convey our conceptions-perceptions of reality to satisfy our immediate desires and needs. It also plays a crucial role in establishing norms of social interaction and, most importantly, preserving and passing down our collective culture from one generation to the next.

Because idiomatics represents the accumulation of shared cultural meaning when we communicate, converse, collaborate, and co-create with and through language, understanding the distinctive qualities of the human mind, as far as we know, remains an area of empirical investigation that raises more questions than it currently answers. To understand society and its people, one must grasp how language in general and idiomatics in particular function; how the brain processes literal and non-literal language; how idiomatic and figurative language change and vary depending on the users' age and social class; how social factors influence the use of symbolic or metaphoric language; how individuals learn appropriate and accurate idiomatic and figurative

language use; and, finally, how best to teach idiomatics effectively and directly (Liontas, 2015, 2018a, 2018b, 2018c, 2018d, 2021a, 2021b, 2021c). This list of considerations is far from exhaustive.

The naturalness of the language heard, the role of idiomatic and figurative language in communication, the availability of referents to signify and clarify meaning, and the specific functions they serve determine the macro-environmental factors that influence the success of human communication (Girard, 2004). Salience, feedback, and frequency constitute the micro-environmental factors that impact the comprehensibility of the communication's content.

Unlike linguists who view language as a rule-governed system in order to discover the rules that make it work, idiomatists—the scholars who study idiomatics—explore how idiomatic-figurative language enables human communication as language develops, evolves, and changes over time and space. Specifically, idiomatists, often referred to as idiomatologists, phraseologists, or phraseodidactologists, examine the social and psychological aspects of idiomatic and figurative language use, as well as the relationships among languages, both historical and contemporary. By analyzing the origins, structure, usage, and cultural context of idiomatic and figurative expressions, phrases, and other fixed or semi-fixed expressions within a language or across languages, they highlight the significance of these expressions in communication and their role in expressing cultural concepts and nuances. Moreover, by identifying and studying idiomatics elements common among different languages, idiomatists can describe, explain, assess, and evaluate the most efficient ways to use idiomatic and figurative language. Understanding the functions idiomatics performs in natural human communication sheds light on the purposes for which idiomatic and figurative language is deliberately employed in conventional, institutionalized, and creative ways.

Idiomatists observe how idiomatic-figurative language is used in natural contexts, form hypotheses about idiomatics learning, and ultimately accept or reject those hypotheses. Without exception, idiomatists worldwide aim to produce systematic observations or to systematically organize existing knowledge for descriptive or pedagogical purposes. They investigate how idiomatic and figurative language shapes perceptions, examine how it is represented and processed in the brain, and explore models of accessing and retrieving general cognitive processes and mental images. They also consider how idiomatic expressions and figures of speech have evolved over time and across different sociocultural contexts. Idiomatists apply their knowledge of idiomatics to a variety of fields, including cognitive psychology, philosophy, comparative idiomatics, communication studies, computer science, artificial intelligence, language education, language teaching, speech pathology, etymology, sociology, anthropology, translation, interpretation, publishing, sign language, technical writing, stylistics, and journalism, among others.

Idiomatics views language from a broader perspective, expanding the discussion of idiomatic language and figurative language beyond the four traditional branches of linguistics (phonology, morphology, syntax, semantics). Language competence involves knowledge of grammar and the rules necessary to produce well-formed utterances. Communicative competence enables speakers to avoid using or making inappropriate utterances. Individual speakers' actual use of language serves as evidence of their performance and natural fluency. And between competence and performance, fluent speakers know how to use their knowledge of phonology, morphology, syntax, and semantics productively (Howarth, 1998; Yorio, 1989). They also intuitively understand how sociocultural context, semantic-pragmatic transparency, and frequency of usage help avoid misunderstandings and misinterpretations of intended communicative meaning, albeit not always. The distinction between competence and performance parallels the

difference between knowing idiomatics (having knowledge of idiomatics) and using idiomatics (purposeful application of idiomatics).

Knowing idiomatics and *knowing about idiomatics* represent two sides of the same coin that underpin the systematic, scientific study of idiomatics proper. This approach is based on a set of assumptions regarding the nature of idiomatics, learning, and teaching. The chosen approach influences how idiomatics proper is perceived and the methods used to make observations, test hypotheses, collect data, and analyze natural usage patterns and conventions of a language that either confirm or refute the initial hypotheses. From form (the surface features of language code) to content (the information encoded in messages) to use (how we utilize and interpret idiomatic-figurative language in a social context), idiomatics knowledge is interactively constructed from a multiplicity of perspectives that embody idiomatics theory and pedagogy.

Individually and in combination, idiomatics form, idiomatics meaning, and idiomatics use in discursive and communicative contexts are the three critical aspects that shape the purposes of human communication and the social dynamics of cultural interaction and cultural knowledge without exception. Put differently, the study of idiomatic and figurative language is compelling for researchers and language practitioners because it explores how we communicate our messages and intentions in a socially acceptable manner. This involves achieving specific contextual purposes and interpretations that may not have been previously apparent. It also includes examining the sound (phonetics, phonology, prosody), structure (morphology, syntax), and meaning (semantics, pragmatics, discourse), making it a multifaceted and intriguing field of study (see Bardovi-Harlig & Dörnyei, 1998; Hinkel, 2014; Nunberg, 1978; Pinker, 1999).

The primary goal of idiomatics is to understand the nature of idiomatic and figurative language and communication as human phenomena. In particular, idiomatics focuses on how idiomatic-figurative language and thought are cognized in the mind and expressed in speech and writing. As a fluid form of expression that communicates thoughts and emotions to evoke new realms of perception and apperception, an emergent theory of idiomatics proper, systematically integrated across the curriculum, aims to uncover and understand the factors influencing the comprehension and production of expressions (Howarth, 1998; Yorio, 1989). Many of these expressions may initially appear to defy logic and truth value. Making these factors explicit can offer valuable insights into language phenomena that still require confirmation (Peters, 1983).

Subjecting these factors to new rounds of exploratory research can uniquely position internal states such as thinking, motivation, attention, decision-making, and problem-solving—five of the most critical ones—to explain, predict, and interpret novel observations of mental processes, behaviors, and emotions associated with the learning and teaching practices of idiomatics. Moreover, integrating idiomatics proper with fact-based ideas and concepts from various disciplines, such as language engineering, machine learning, natural language processing, artificial intelligence, computer simulation of human language processes, and robotics, among others, can lead to significant advances in understanding this multifaceted field.

Fundamentally, idiomatics proper is concerned with the nature of idiomatic-figurative language and communication, not just by what is said but, more importantly, by what is meant through how something is expressed. Its subject matter, understandably, is idiomatic language and figurative language in all its manifestations. In this regard, theoretical idiomatics is concerned with understanding what it means to know idiomatic language and figurative language, to learn idiomatics, and to use idiomatics purposefully—*with a purpose* and *for a purpose*.

The study of the nature and organization of idiomatics knowledge in the mind, as revealed by the general idiomatics principles that characterize natural languages, forms the foundation for

how data are collected and analyzed, hypotheses are tested and (dis)confirmed, models are devised and revised, and theories are constructed and validated or falsified based on observations recorded for further study and analysis. Collectively, these aims underpin the subject matter of idiomatics proper, which straddles the line between literal and non-literal language in both descriptive and prescriptive ways. The former (idiomatics description) entails analyzing and describing how idiomatic and figurative language is spoken by a group of people in a speech community. The latter (idiomatics prescription) defines and refines idiomatic and figurative language in authoritative, definitive, and comprehensive ways and provides guidance on the effective and efficient use of idiomatics knowledge in conventional and creative contexts.

The representation of idiomatics proper in the mind both reflects and reveals the architecture of the mind itself (Jackendoff, 1997; Pawley & Syder, 1983). The mind serves as the starting point for exploration and discovery. Conversely, the application of idiomatics proper in its natural social context embodies the translation of theory into practice. Idiomatics learning forms the continuum upon which human communication—whether spoken, written, or gestured—is built. Intertwined with human biology, idiomatics learning constitutes the common ground of shared experience. Its acquisition is directly linked to the cognitive processes of first and second language learning (Kecskes, 2000, 2006; Kövecses, 2005; Kövecses & Szabó, 1996; Roberts, 1944), a long and arduous process that extends over many years.

Because idiomatics learning occurs throughout an individual's life span and progresses according to stages of human cognitive development, *idiomatic language acquisition* is the process by which children become fluent users of their native language. On the other hand, *figurative language acquisition* is the process by which children become creators (producers) of their native language. In this context, idiomatics learning is not only the result of experience in a specific linguistic environment, but also an individual's proficiency in constructing and using idiomatics effectively and efficiently, aligning with the natural production of human language in communication.

Idiomatic language is, in many ways, a learned skill—a behavior that children acquire primarily through the type and amount of input (noticing, awareness, exposure), global and local feedback, sustained effort, and expanded yet creative play practice (modeling, imitation, initiation) in both formal and informal environments within a given speech community at a particular time and place. Social formulae, collocations, binomials/trinomials, sentence frames, idioms, colloquialisms, clichés, jargon, euphemisms, acronyms, and a small set of easily recognized and frequently used slang, similes, metaphors, metonymies, and proverbs are all part of the idiomatic language domain. This domain is both conventionalized and institutionalized within a single locale, region, or geographic area (e.g., the Southeast, Texas, the United States of America) and often across the same language family (e.g., American English, British English, Australian English), albeit with distinct cultural variation in lexis, prosody, and phonetics.

Put another way, idiomatic language is the codified system of shared norms and practices within a given speech community that defines and characterizes the sociocultural boundary markers of interaction in natural settings (i.e., how people actually use language idiomatically in diverse communicative contexts). In short, idiomatic language is "the natural mode of expression and phrasing of a language," that "uses, contains, or denotes peculiar or characteristic expressions, words, or phrases that native speakers routinely use and consider natural and correct" (Liontas, 2021c, p. 32). For instance, jargon—specialized words and expressions that are challenging for those outside the specialized group to understand—must be learned not only in terms of the words themselves but also how they are used. Excessive use of jargon can render language

incomprehensible and unnecessarily complex for those unfamiliar with the field of study. Conversely, overusing clichés can be seen as using 'tired' language that has lost its originality and freshness of expression, assuming there is agreement on which expressions have lost their vitality, original meaning, or rhetorical effect, regardless of creative allure.

Unlike idiomatic language, *figurative language* involves coding thoughts in creative ideographic or pictographic tropes and schemes to achieve new levels of cognition previously unexplored. Both ordinary and imaginative knowledge of language are woven into the fabric of human communication to evoke new realms of perception and apperception that transcend literal language. In short, figurative language is creative, non-idiomatic language that must be deciphered, interpreted, and understood. It is artfully crafted by the author to "suggest meaning rather than directly giving meaning" and to play "imaginatively with the meaning of words in order to build and furnish layers of meaning beyond the purely literal for particular descriptive effect" (Liontas, 2021c, p. 32).

In the end, it is the synergistic network of idiomatic and figurative language that forms the core of *idiomatics proper*. Understanding this nexus is essential for addressing the questions posed by the field. Yet, many inquiries remain unanswered concerning the Nature of Idiomatics Proper (IPN), Idiomatics Meaning and Communication (IMC), Idiomatics Among Languages (IAL), Idiomatics Diachrony and Synchrony (IDS), Idiomatics Theory and Practice (ITP), and Idiomatics and Digital Media (IDM). Table 1 succinctly summarizes the various aspects and dimensions covered by these six themes.

Table 1
Idiomatics Overarching Themes

Theme	Goals and Objectives
IPN	Explores idiomatic and figurative language, including its essence, acquisition, application, and principles, offering a framework to understand its impact on human communication.
IMC	Explores idiomatics from various perspectives, including its relation to sounds, gestures, meaning, communication, cognition, linguistic-human behaviors, social interactions, and cultural norms, while also analyzing its structural features and differences from literal language.
IAL	Explores idiomatics among different languages and within communities, studying variations, commonalities, global patterns, and sociocultural impacts, influencing interactions and cultural transmission.
IDS	Explores the role of idiomatics in human communication and cognition, exploring complexity, significance, benefits, cognitive processes, development, and societal impact.
ITP	Explores idiomatics theory and practice across theoretical, empirical, pedagogical, and technological dimensions to advance field understanding.
IDM	Explores how to combine idiomatics with digital media, using immersive spatial multimedia elements and advanced technologies like NLP, machine learning, and AI to improve learning experiences, making them more engaging, effective, and accessible.

While none of these overarching themes claim to offer a complete understanding on their own, they serve as foundational elements for initiating discussions on various aspects of idiomatics

proper. Each theme is expected to inspire further exploration, fostering ongoing dialogue. Although detailed responses may not be readily available, these six themes represent significant initial progress. Individually and collectively, they function as multifaceted lenses, enabling the examination of diverse research inquiries and hypotheses. Within each thematic category, I recommend adopting a tripartite structure consisting of *Domain*, *Query*, and *Focus/Purpose*. This structure provides clarity and context to the subject matter, followed by a focused question and its intended purpose. At its core, the six themes drive profound cross-pollination, creating a rich tapestry of dynamic connections that transcend mere numerical evaluation. Figure 1 visually illustrates the dynamic interplay among the six fundamental themes of idiomatics, emphasizing that idiomatics is a unified concept with greater significance than the sum of its parts. The epicenter of these intricate connections is metaphorically depicted as a Rubik's Cube, the most famous puzzle of all times, imbued with dynamic complexity and boundless energy—the pulsating core of idiomatics.

Figure 1
Idiomatics—The Whole Is Greater Than the Sum of Its Parts
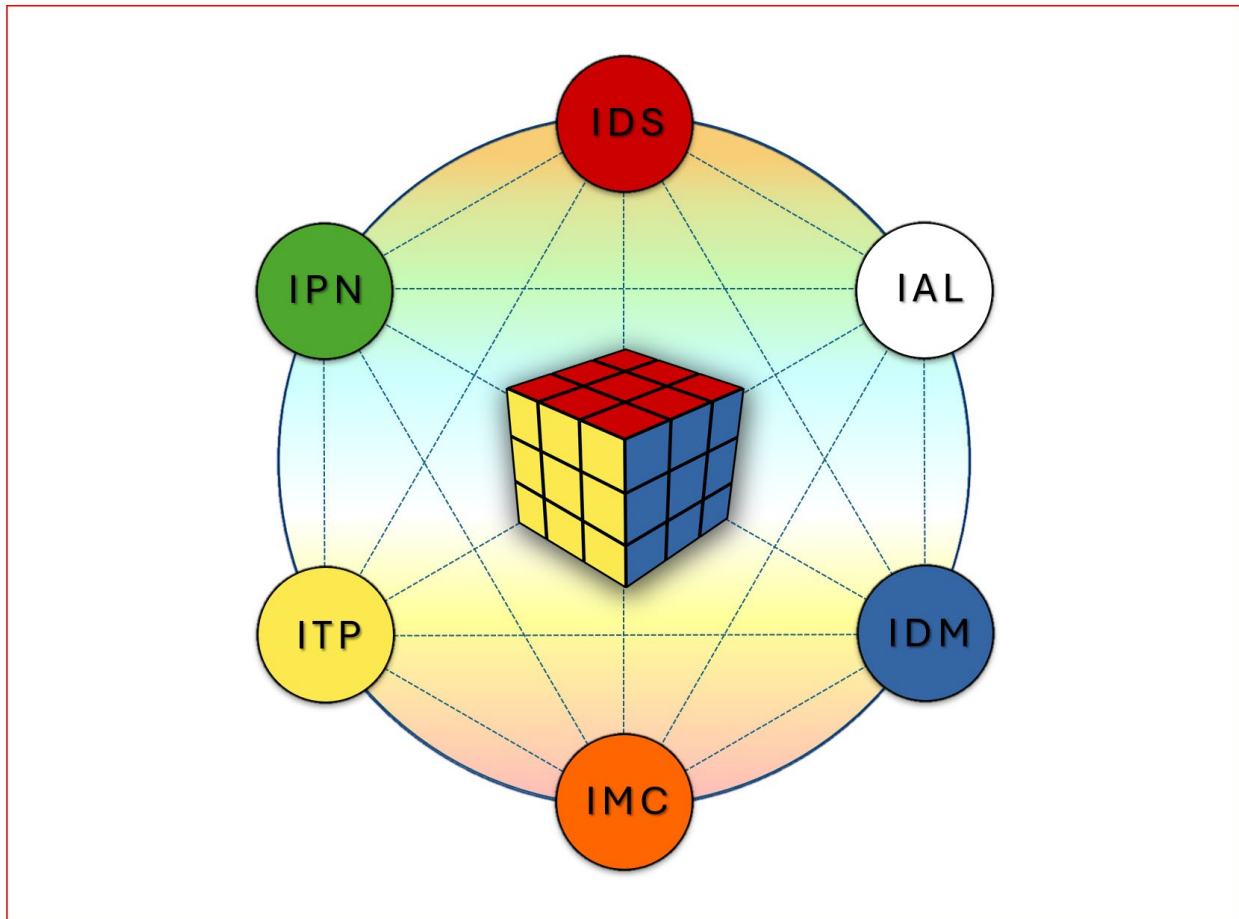
To underscore the interconnectedness and depth of exploration within these thematic threads and inquiries, the 3x3x3 Rubik's Cube metaphor, also known as the Magic Cube, is conceptually expanded to elucidate the inherent complexity of idiomatics. This three-dimensional cube features six faces (or sides) in colors of White, Green, Red, Orange, Blue, and Yellow. Each

of the cube's six faces can be rotated in two directions (clockwise and counterclockwise), and each face comprises nine smaller squares (or tiles), totaling 54 cells (9 cells per face multiplied by 6 faces). These cells are categorized into three sets: 6 centers (which remain fixed), 12 edges, and 8 corners. The 6 center cells, situated at the center of each face, remain fixed in position; they simply rotate around their own axes. There are 12 edge cubes, each with two visible faces that can be scrambled in 12! (12 factorial: $12 \times 11 \times 10 \times 9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1$) different ways, each capable of being oriented in 2 ways, for a total of 2^{12}. Once the orientation of 11 edge cubes is set, the 12th is fixed, reducing the number to 2^{11}. The 8 corner cubes have three visible faces each, which can be scrambled in 8! (8 factorial: $8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1$) different ways. Swapping two corner cubes requires swapping either two additional corner cubes or two edge cubes, resulting in 8!/2 permutations. Each corner cube can be oriented three different ways, but once 7 of the 8 edge cubes are oriented a certain way, the orientation of the 8th is fixed, reducing the number to 3^7 possible orientations. All that is left to do then is to multiply these numbers together: $8!/2 \times 3^7 \times 12! \times 2^{11}$. It is that simple!

Now, envision each face of the Rubik's cube adorned with a colored thematic thread, each cell bearing a thought-provoking question waiting to be explored. The objective is to align the tiles so that each side displays a singular color—an endeavor bordering on the impossible. Can you truly grasp the magnitude of the permutations (i.e., 'state' of the puzzle) this arrangement creates? Can you even begin to fathom the myriad ways these 54 cells on a 3D Rubik's cube can be rearranged, all without ever disassembling the cube itself? I will spare you the daunting task of calculating the exact arrangements. The staggering, mind-blowing number is 43,252,003,274,489,856,000—43 quintillion, 252 quadrillion, 3 trillion, 274 billion, 489 million, and 856 thousand, or simply, 43 quintillion possible permutations. This figure, with 43 followed by 18 zeroes, exceeds even the total count of grains of sand on Earth's surface and the stars in our observable universe (visit https://www.cubelelo.com/blogs/cubing/permutations-for-a-rubiks-cube).

Beyond the sheer numerical magnitude lies the intricate understanding of how this process unfolds and what it signifies. Exploring the calculations needed to maneuver through this extensive range of configurations unveils the fundamental structure of the system. Despite its astronomical scale, be assured that this puzzle can be solved in an average of 20 moves or less. This is famously referred to as "God's number," denoting the minimum moves needed to solve any scrambled arrangement of the cube, regardless of the initial position (Kiersz, 2019). It is worth reiterating that the six overarching themes (IPN, IMC, IAL, IDS, ITP, IDM) wield transformative power, orchestrating a complex web of dynamic connections far beyond numbers. Figure 2 underscores the profound interconnectedness and depth of exploration these themes and inquiries unlock.

Mind-numbing calculations aside, *idiomatics proper* is not merely a linguistic byproduct or a secondary aspect of language. Instead, it intricately intertwines with how we think and communicate, embracing both the literal and the non-literal. While the origins of certain expressions may fade into history, they become deeply ingrained in a culture's linguistic tapestry over time. As successive generations become *idiomatized* in their native language, they also internalize the cultural norms and practices interwoven within it (Liontas, 2015, 2019). Many of these expressions gradually undergo standardization as they are embraced and assimilated by the speech community. This ongoing process imparts language with its distinctive character, marked by unique expressions and nuanced variations.

The passage of time and the preservation of various texts, including audiovisual and multimedia materials, allow etymologists and lexicographers alike to unravel the historical events

that birthed specific expressions. Spanning folklore, mythology, history, science, sports, entertainment, politics, religion, literature, art, and countless other domains, each facet of human interaction offers compelling evidence of the endurance and evolution of these linguacultural artifacts. Imbued with the essence of human experience, these expressions traverse through time and space, thriving alongside diverse variants, fulfilling distinct purposes. They endure cycles of reverential use and misuse by early language pioneers, experiencing periods of existence and revival, and ultimately undergoing reinterpretation and rejuvenation in the hands of successive generations of speakers, manifesting in fresh and innovative forms.

Figure 2
Idiomatics—A 3x3x3 Rubik's Cube
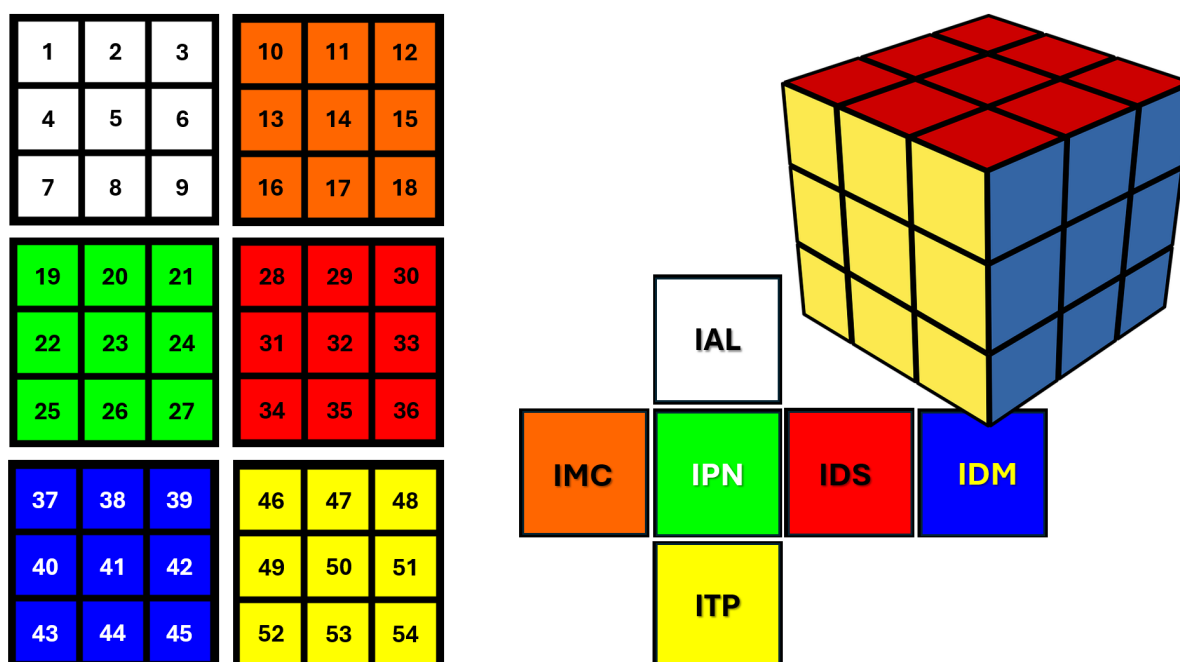
Note. Number of possible permutations on the Rubik's cube: $8!/2 \times 3^7 \times 12! \times 2^{11} = 43,252,003,274,489,856,000$ or 43 quintillion, 252 quadrillion, 3 trillion, 274 billion, 489 million, and 856 thousand.

Time, the only constant, bears witness to a long list of developments and changes: the evolution of language itself, the creative expression of human behavior and abstract thought, and the codification of language in sounds, gestures, marks, or signs. It encompasses expression perceived and apperceived in the production of natural language use, where ideas, emotions, and desires are intricately woven into the tapestry of human communication. Wants and needs are productively displayed in the sociocultural dance of life.

The accumulation of cultural content arises from shared experiences, establishing a common ground of referents that clarify meaning through form, function, and usage. This content is conveyed through both conventionalized and creative means. Thus, conceptions conceived become perceptions perceived within idiomatics proper. Encountering idiomatics stripped from its contextual tapestry, bereft of genuine purpose or rhetorical resonance, mirrors the discovery of a lone entry in an abandoned lexicon. It embodies a lifetime's worth of memories crystallized into a

fleeting instance, laying bare the intricate depths of the human psyche, both in its private reveries and public discourse. Indeed, idiomatics proper transcends mere linguistic constructs; it is the very essence of language itself. Idiomatics is language. Language is idiomatics. To perceive it otherwise is to clutter the harmonious symphony of expression with extraneous noise. Period. Full stop.

The Road Ahead

As a field, idiomatics proper can no longer conform to the status quo; it is like fitting a square peg into a round hole. Even under the best circumstances, forcing this non-round fit results in loss of form and volume. The evidence lies in its sharp corners. While sheer force from above might make every square peg fit, the cost is too high to justify. This approach is not sustainable. It is time for idiomatics to liberate itself from the constraints imposed by other disciplines and carve out its own distinct voice, its own distinct identity within the academic landscape. It should stand among the multitude of voices shaping fields like first and second language acquisition, literacy, instructional technology, CALL/MALL, linguistics, language education, language planning, bilingual and multilingual education, teacher education, ESP, NLP, AI, etymology, lexicology, and countless others.

In plain terms, idiomatics must carve out its own niche to ensure its relevance as a dynamic field deserving recognition among its peers. To put it succinctly, if it is still "hip to be square," idiomatics must become the square peg in a square hole—a concept as clear as day. It must embrace its unique role and set its own parameters and standards for future engagement, crafting its playbook along the way. Above all, it requires a clear sense of identity and autonomy to distinguish itself among the multitude of disciplines, much like the distinctions between soccer, American football, and rugby, with each asserting its unique essence within the realm of sports worldwide.

Idiomatists worldwide can no longer afford to remain on the sidelines. The time for action has come. It is time to step onto the field. The bench is deep, the rules are set, and it is game on. Snatching victory from the jaws of defeat may seem as farfetched as the age-old claim that the world is a stage and we are merely players with our entrances and exits. And if that claims holds true, should we not know by now who controls the stage lights? No wonder everyone in the English-speaking world tells us to "break a leg." Ask the Germans, and they will add *Hals- und Beinbruch* ("break your neck and leg") just for good measure.

No doubt, the road ahead is full of twists and turns, false starts and full stops, U-turns and zigzags. Reaching the mountaintop will not be easy; easy is not our task. Shamelessly borrowing from President John F. Kennedy's speech at Rice University on September 12, 1962,

> We choose to ... do the other things, not because they are easy, but because they are hard, because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one which we intend to win.

Three scores hence, the resonating call to "Climb the Highest Mountain" remains as poignant as ever. Idiomatics stands before us as our towering peak to scale—the quintessential challenge of our era. Yet, realizing this aspiration demands not merely vision but also unwavering perseverance—an unyielding commitment to surmounting obstacles and navigating through turbulent waters, even as adversities loom like ominous waves, threatening to dash our vessel upon the jagged rocks in the dead of night.

Hope springs eternal in the human breast—a fundamental and enduring aspect of human nature, Alexander Pope wrote in his poem "An Essay on Man," urging us to persist even in the face of adversity or challenges. Yet mere hope alone, without decisive action, infused with lofty ideals, unwavering determination, and fervent passion, will prove inadequate to navigate the arduous journey ahead—a voyage of a thousand miles that hinges not just on the initial step we dare to undertake, but on the successive strides we muster thereafter. Do we take the road less travelled? The path uncharted? The trail yet unexplored?

Decisions, whether consequential or not, should not be solely driven by the intense emotions that fill our minds and hearts. To climb mountains... No, scratch that! To move mountains, unwavering dedication to the successful completion of the mission is paramount and non-negotiable. The old adage, "Business as usual," no longer suffices; it is a relic of the past. What is urgently needed today, tomorrow, and in the days ahead is a clear and decisive plan of action—one that embodies a steadfast commitment to reaching heights previously unimagined. In the wise words of Pearl S. Buck, "All things are possible until they are proved impossible — and even the impossible may only be so, as of now." The time for action is now. Now is the time to make the impossible possible. Even the word "Impossible" declares, "I'm possible."

Aristotle's art of persuasion—ethos, pathos, logos—extends a much-needed hand in our endeavor. The metonymy "all hands on deck" underscores the collective effort required, while the phrase "all eyes on [idiomatics]" highlights the attention our field deserves. Idiomatists worldwide may find solace in knowing that success emerges from resolute action. Echoing Pablo Picasso's words, "Action is the foundational key to all success." The question then arises: Where do we obtain this key? Is it a commodity readily acquired through diligence and effort, or must it be crafted from scratch? Indeed, it stands as the cornerstone of achievement. And as the adage goes, "success begets success"—a timeless truth reiterated throughout the ages.

Put plainly, the field of idiomatics proper beckons for its own rallying cry, one that emboldens idiomatists worldwide with a resounding call to action (see also Liontas, 2024a, 2024b). The ongoing discussion thus far regarding the specifics of idiomatics proper have been thorough and detailed, emphasizing the critical need to recognize idiomatics proper as a distinct field requiring systematic, scientific exploration of both idiomatic language and figurative language. Through explicit discussions on its methodology, subject matter, and theoretical underpinnings, the urgency to delve deeper into understanding idiomatics and its nuances has been underscored. The analogy of idiomatics to a Rubik's cube serves as a roadmap for future investigations, urging idiomatists to confront the core thematic challenges head-on. While the six selected representative themes provide an introductory overview of the inquiries awaiting exploration, it is crucial to heed the call to action. This imperative summons us to engage, with its specifics delineated in the following concluding segment of the article.

Make It Happen! A Call to Action, A Call for Action

Resisting the allure of repeating previous figures of speech, I conclude this section with a compelling call to action. Encapsulated in just three words, this call serves as both an appeal and an urgent directive to idiomatists globally, emphasizing the pressing nature of the current situation: *Make it happen!* The time for action is now.

"Make it happen!" resonates as the rallying cry, summoning us all to action. It embodies a collective vision and mission, transcending boundaries of geography and language, uniting researchers and language practitioners under a common purpose. This resolute call to action is encapsulated within ten statements that serve as guiding lights along the path forward. Individually

or collectively, these statements pave the way toward a brighter future for the field of idiomatics proper. Amidst the relentless dedication of those laboring tirelessly, often in obscurity, this call stands as a testament to their unwavering commitment. They toil through the night, burning the midnight oil, striving to refine, elucidate, and ultimately authenticate idiomatics as the definitive scientific study of language, encompassing both idiomatic language and figurative language. This acknowledgement of their dedication propels us towards greater understanding and discovery.

The statements are crafted from the ten letters forming the word I-D-I-O-M-A-T-I-C-S. Each letter corresponds to a noun replacing "it" in the imperative "Make it happen!". Together, these nouns represent thematic priorities in the original order of the letters, without implying hierarchy in action. Following each priority is a brief description indicating the associated action. Here is the list of priorities derived from "Make i-d-i-o-m-a-t-i-c-s happen!", along with the corresponding noun in the call to action, in the call for action:

Make I – D – I – O – M – A – T – I – C – S Happen!	
I	**Make inspiration happen!** Inspiring idiomatists worldwide to envision the field not as it stands today—fragmented, disorganized, unidentified—but as it could and should be tomorrow and beyond: unified, structured, universally recognized, with a shared vision and defined mission.
D	**Make declaration happen!** Declaring the establishment of an association, society, or academy dedicated to championing and advocating for the needs and aspirations of idiomatists globally, across local, state, regional, national, and international levels.
I	**Make investment happen!** Investing in human capital, infrastructure, research facilities, equipment, academic programs, degree conferment, grants, digital technology, software development, and multimedia production supports the comprehensive study of idiomatics proper in all its forms.
O	**Make organization happen!** Organizing professional gatherings and symposia dedicated to exploring idiomatics, sharing cutting-edge research and industry insights, alongside coordinating summer seminars, academies, and educational institutes, enhances professional growth and development opportunities.
M	**Make motivation happen!** Motivating educational institutions, organizations, ministries of education, and school boards to collaboratively develop guidelines, standards, and testing protocols for curriculum design, material creation, and assessment across all grade levels and educational environments.
A	**Make agreement happen!** Agreeing to establish new master's and doctoral degree programs, certificates, fellowships, and internships worldwide for language specialists in idiomatics proper and second language acquisition studies.
T	**Make transformation happen!** Transforming the professional discourse surrounding research and practice aimed at describing, explaining, and predicting the nature of idiomatics proper.
I	**Make information happen!** Informing the academic community and associated stakeholders about breakthroughs and findings in idiomatics research, grants, practices, curricula, standards, assessments, program evaluations, materials development, and digital technology innovations advances scholarly and scientific inquiry in the field.
C	**Make codification happen!** Codifying idiomatics nomenclature into a robust framework of definitions, descriptions, and explanations invigorates the dynamic exploration of nascent domains in both research and practice within idiomatic and figurative language.
S	**Make success happen!** Succeeding in establishing a consistent publication schedule for an international journal and a curated series of professional edited volumes advances scholarly and pedagogical efforts across the entirety of the idiomatics field.

At its core, "Make idiomatics happen!" embodies the symbiotic synthesis of Inspiration, Declaration, Investment, Organization, Motivation, Agreement, Transformation, Information, Codification, and Success—ten foundational pillars, elegantly inscribed within each letter. This synthesis presents a unique opportunity to reimagine and refine the essence of the field with renewed vigor and clarity. The harmonious integration of these interdependent and mutually reinforcing components contributes to the overarching goal of advancing idiomatics proper. They work together in a reciprocal relationship, with each element complementing and supporting the others to achieve our shared objective.

In essence, making idiomatics happen entails several pivotal components. Firstly, it demands Inspiration, fueled by boundless imagination and an unwavering commitment to surmount obstacles. Following this, Declaration emerges, signifying a resolute dedication to laying a sturdy foundation for the field's advancement. Investment then plays a vital role, providing the essential resources to translate vision into reality. Additionally, Organization optimizes offerings and services, ensuring operational efficiency and efficacy. Motivation propels the allocation of time and effort toward creative pursuits, fostering progress and innovation. Agreement, underpinned by trust, is indispensable for ensuring that signed memoranda of understanding are embraced and implemented by institutions and research centers worldwide. Transformation encompasses both theorizing idiomatics practice and actualizing idiomatics theory, enabling the adaptation of trending themes and topics from professional literature. Information is paramount in imparting fresh knowledge and shaping research-based practices, thereby illuminating idiomatics proper with profound interpretations. Codification entails capturing the intricacies of chosen codes, while also discerning connections between creative constructs. Success, conversely, arises from the relentless pursuit of definitive answers, synthesizing the wealth of scientific findings amassed to date. Ultimately, a resolute declaration paves the way for a robust agreement within the organization, drawing upon the early investments for inspiration and motivation, thus culminating in the success of transforming and codifying accumulated information over time.

These ten actions are certainly not the only actions to be taken in the foreseeable future. I could easily expand the list to include another ten or so actions, but doing so would only make it longer. And a lengthy list is one that few care to read or want to read. It is wise to avoid biting off more than we can chew at any given moment if we intend to thoroughly check and double-check the initial list for completeness and accuracy. Moreover, who is to say that these ten actions are not, as the saying goes, "one iron too many in the fire"?

Perhaps it is wise to start our action plan by tackling the easiest tasks first and then progressing to more complex ones. Alternatively, we might consider the advice given by Mark Watney (played by Matt Damon) to future hopeful Martians in the 2015 movie, "The Martian":

> At some point, everything's gonna go south on you... everything's going to go south and you're going to say, this is it. This is how I end. Now you can either accept that, or you can get to work. That's all it is. You just begin. You do the math. You solve one problem... and you solve the next one... and then the next. And If you solve enough problems, you get to come home. All right, questions?

Both the six overarching themes previewed earlier and the ten proposed actions share a common thread: *experience baptized by fire*. Not to delve too deeply into philosophy, but every major problem or challenge can be addressed by adhering to the "one step back, two steps forward" principle.

Why start with one step back? This backward glance allows us to revisit the past, to assess experiences lived, actions taken, and lessons learned. Philosopher George Santayana famously asserts, "Those who cannot remember the past are condemned to repeat it." Reflecting on our ongoing journey, often akin to "going down memory lane," proves essential. It not only rekindles feelings of nostalgia (of the good ol' days) but, importantly, also bears witness to the progress made in our journey of discovery and exploration.

Put simply, the scientific and intellectual advancements achieved to date are directly attributable to the concept of "standing on the shoulders of Giants"—a notion that acknowledges the contributions of those who preceded us (the Past) (see Barkema, 1996; Cacciari & Glucksberg, 1991; Chafe, 1968; Fernando & Flavell, 1981; Firth, 1957, 1968; Fraser, 1970; Goldberg, 2006; Katz & Postal, 1964; Newmeyer, 1972, 1974; Nunberg, 1978; Palmer, 1925; Roberts, 1944; Smith, 1925; Strässler, 1982; Weinreich, 1969; Wray, 2002). This timeless sentiment, famously penned by Sir Isaac Newton in a letter to fellow English scientist Robert Hooke on February 5, 1675, remains as relevant today as it was 348 years ago: "If I have seen further it is by standing on the shoulders of Giants." Conversely, taking two steps forward enables us to grasp the current landscape of idiomatics, including its pressing issues and the exigency of the moment (the Present), while boldly forging ahead to pioneer tomorrow's frontiers of scientific inquiry and exploration (the Future).

And between the Past and the Future, the Present stands still, if only for a fleeting moment. Here. Now. Pulsating through time, it pulls the past forward, carrying with it the embodied creative cognition of humanity itself, the cultural consciousness of those who faithfully stood guard over the ebb and flow of language through time and space. Pausing just long enough to invent new trains of thought—stretches of imagination adorned in vivid color and rhetorical power. A *Weltanschauung* refined by the passage of time. Always in motion. Always evolving. Continuously shaping and responding to the tides of social, political, and technological change. Adding to the majestic tapestry of human ingenuity without parallel. In action lived. In action experienced. In action taken.

This is where our idiomatics journey begins—beneath our feet, with a single step, at the end of yesterday and the beginning of tomorrow. As T.S. Eliot eloquently expressed, "What we call the beginning is often the end. And to make an end is to make a beginning. The end is where we start from."

Thus commences our odyssey. With a single step forward. And another one after that. Each step a *pas de deux* with knowledge. It is a symphony, a dance of enlightenment; advancing, pausing, then surging ahead. A rhythm of yore, present, and yet to come, choreographed by the relentless march of time. Each step, a testament to our voyage, a journey of a thousand miles begun with one. Amidst the vast expanse of possibilities, 2,112,000 steps await our imprint.

Time's fleeting whispers beckon. Let us not tarry.

Let's ignite the flame of action! Let's make it happen! All for one, one for all!

Onwards we go!

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