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On Time and Tea Bags: Chronos, Kairos, and Teaching for Humanistic Practice

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Abstract

In these days of overwhelming clinical work, decreased resources, and increased educational demands, time has become a priceless commodity. Competency-based medical education attempts to address this challenge by increasing educational efficiency and decreasing the “steeping” of learners in clinical activities for set durations of time. However, in this environment, how does one teach for compassionate, humanistic practice? The answer arguably lies in clinician teachers’ recognition and engagement in a different type of time, that of kairos. Ancient Greek thought held that there were two interrelated types of time: chronological, linear, quantitative time—chronos—and qualitative, opportune time—kairos. Unlike chronos, kairos involves a sense of the “right time,” the “critical moment,” the proportionate amount. Developing a sense of kairos involves learning to apply general principles to unique situations lacking certainty and acting proportionally to need and context. Educationally, it implies intervening at the critical moment—the moment in which a thoughtful question, comment, or personal expression of perplexity, awe, or wonder can trigger reflection, dialogue, and an opening up of perspectives on the human dimensions of illness and medical care. A sensibility to kairos involves an awareness of what makes a moment “teachable,” an understanding of chance, opportunity, and potential for transformation. Above all, inviting kairos means grasping an opportunity to immerse oneself and one’s learners—even momentarily—into an exploration of patients and their stories, perspectives, challenges, and lives.
In medical education these days, time is not on our side. The demands in academic medicine—the increased number and complexity of patients on hospital services, the decreased number of trainees and limitations on trainee work hours, increased accreditation demands for learner observation and assessment, increased paperwork to track learning, shrinking research and educational funding, and increased pressure to account for one’s time and productivity—all take a toll on teaching and on the lives of clinician teachers and learners alike. From a health systems perspective, time has likewise taken on an increasingly prominent role in measures of quality (productivity, efficiency, length of stay, workflow), and the notion of time has even entered into the definition of subspecialty fields in medicine (e.g., the nocturnist shift work in hospitals, acute versus chronic care). In the midst of all of these demands, one wonders how it is possible to take out any time at all to teach learners to become thoughtful, patient, compassionate, reflective practitioners.

There’s simply never enough time.

The issue of time—of lack thereof—is also an underlying preoccupation in medical education. In an influential publication in 2010, Hodges proposed that current models of competence in medical education are based on two competing discourses: the traditional “tea steeping” model in which medical students are “steeped” for a period of time in different types of clinical experiences as part of their training, and the outcomes-based “iDoc model,” in which students are viewed as educational “products” who are churned out by medical schools in a manner reminiscent of the manufacturing of iPods. In other words, to make medical education more efficient, learning becomes a process of acquisition, or achievement, of discrete educational units (competencies, milestones, entrustable professional activities) instead of mere exposure to, and immersion in, the practice of clinical medicine.
As we and others²⁻⁵ have argued, however, efficiency is in itself a means and not a goal, and there are many qualities of practicing physicians that cannot be accurately captured in competencies or entrustable professional activities. In response to this drive towards efficiency, Wear et al⁴ have urged the slowing down of medical education in order to enhance reflection on the human dimensions of medicine and clinical practice. We⁶ have previously proposed the creation of space for reflection and dialogue, and recently, one of us (A.K.K.) and colleagues⁷,⁸ proposed stepping in and out of dialogical moments, in which reflection and dialogue are engaged in busy clinical environments as a means of opening up new ways of seeing and knowing about the human dimensions of medicine. But how does a clinical teacher recognize such moments? This comes back to the question of time.

The ancient Greeks recognized two forms of time—chronos and kairos—which encompass all movement and change. Chronos is linear, chronological time. It is quantifiable into seconds, minutes, hours, days. In his Physics⁹ Aristotle proposes that chronos has three characteristics: change, measurement, and sequence—that is, events change something or someone over a measurable duration, and the time surrounding these events is ordered into a “before” and “after.” Together, these characteristics allow chronos to act as an ordering of things present and past, as well as a chronicle of events, such as the passage of milestones or stages. There is, however, nothing about significance or meaning in the concept of chronos; it is a mere listing of occurrences. Instead, the significance and meaning of events are subsumed under the notion of kairos (καιρός, “keh-rós”).
Whereas *chronos* is quantitative, *kairos* is qualitative.\textsuperscript{10,11} A concept recognized in ancient Greek thought since the *Iliad*, *kairos* gradually evolved in ethics and rhetoric\textsuperscript{12} into a complex, multifaceted concept that connotes a wide range of ideas.

Unlike *chronos*, which is an indiscriminate listing of events, *kairos* connotes a “critical moment” in time that assumes special significance. Not only is the specific event or occurrence itself special, but its *timing*—where and how it occurs in time—is also essential. Through the ebb and flow of history, what gives specific events significance or meaning is not *chronos*—which is the ebb and flow—but *kairos*, which identifies a specific point in time as meaningful.\textsuperscript{11} This “right moment” is the specific context in which an important action or event occurs.

In the *Nicomachean Ethics*, Aristotle discusses the importance of using practical wisdom (*phronesis*) to determine “what is appropriate to the occasion” (i.e., *kairos*) in applying principles in situations that lack “fixity” or clarity. He states:

> Matters concerned with conduct and questions of what is good for us have no fixity, any more than matters of health. The general account being of this nature, the account of particular cases is yet more lacking in exactness; for they do not fall under any art or set of precepts, but the agents themselves must in each case consider what is appropriate to the occasion [πρὸς τὸν καιρὸν, *pros tou kairon*] as happens also in the art of medicine or navigation.\textsuperscript{13}

*Kairos* also connotes an opportunity during a moment of crisis. *Kairos* describes both this moment and also the opportunity for individual action to influence that moment.\textsuperscript{11}
**Kairos in Medicine and Medical Education**

As Aristotle suggests in the quote above, medicine embodies *kairic* practice. Medicine, like navigation, requires an ability to apply principles at the right moment to what is appropriate to the occasion, even in cases where there is a lack of clarity. It means thoughtfully and judiciously navigating the grey areas of clinical uncertainty and making crucially important decisions without the benefit of complete information. In medicine we often overlook the gulf that exists between, on the one hand, biomedical theories, epidemiologic data, clinical trial evidence, and clinical practice guidelines, and on the other hand, their relevance to the unique, individual patient in front of us.\textsuperscript{14,15} The concept of *kairos* teaches us to develop a sensitivity to nuance, context, and variation in the application of general principles, all to foster effective ways of addressing clinical needs in what Schön\textsuperscript{16(p42)} calls the “swampy lowland” of actual practice.

In a similar vein, Hippocrates\textsuperscript{17(p99)} himself argued that *kairos* is central to the art of healing and prognostication.

\begin{quote}
Healing is a matter of time [*chronos*] but it is sometimes a matter of opportunity [*kairos*]...one must attend in medical practice not primarily to plausible theories, but to experience combined with reason.
\end{quote}

In clinical practice, *kairos* sometimes means an interlude from the usual flow of words or events to uncover new meanings and directions. As an endocrinologist working with individuals with type 1 diabetes, one of us (A.K.K.) spends much of the initial visit with new patients trying to understand not just their diabetes but also what they do in life. Although this line of questioning might appear inefficient, one of the goals of the first visit is to discover critical points of entry into an ongoing dialogue in which the care of their diabetes and the rest of their lives and priorities can merge and find resonance. For example, this may involve talking about the rhythms...
of daily insulin injections and monitoring with a jazz musician or marathon runner, the technical
intracacies of pump or glucose sensor therapy to an engineer, the constant experimentation and
“tweaking” of insulin adjustments to a scientist, the creative play of improvisation to a cook or
artist. This vigilance for the “opportune moment” to establish a connection of mutual
understanding is kairos.

As educators, however, we would like to examine the first meaning of kairos—that of a critical
moment in time—in order to understand how clinical teachers may learn to express a kairic
sensibility towards the opening up of dialogues around the human dimensions of illness and its
care.

In medical education, timing is everything. The so-called “teachable moment” has become nearly
iconic in medicine, not only in patient education\(^\text{18,19}\) and clinical practice\(^\text{20,21}\) but also in the
teaching of ethics,\(^\text{22}\) effective communication,\(^\text{23}\) and dealing with medical error.\(^\text{24}\) A similar
concept, the “critical incident report” has been proposed as a means to develop a humanistic
professional identity.\(^\text{25}\) The experiential equivalent of the teachable moment is Virginia Woolf’s
“moments of being” in which a seemingly inconsequential event in time triggers a sense of
fundamental importance by connecting with a deep-seated feeling or memory.\(^\text{4,26}\) Medicine is
filled with these types of moments of being, which are different from teachable moments or
critical incidents in that they are not necessarily defined or introduced by a teacher but rather
arise from the recollection of a profoundly individual experience within the learner.

Given the transformative nature of medical education on an individual’s professional (and
personal) identity formation,\(^\text{27}\) the importance of these “teachable moments,” “critical incidents,”
or “moments of being” in the education of physicians cannot be overemphasized. They are in
fact the educational equivalent of the “opportune moments” of Hippocratic clinical practice.\(^\text{17}\)
Teachable moments may occur in an almost random, unpredictable manner and may present as opportunities that are particularly ripe for individual change; however, the manner in which educators may identify and take advantage of such moments when they occur is unclear. We would argue that first, educators’ sensitivity towards such moments is essential: a sense of opportunity, change, timing—in short, a sense of *kairos*. This involves an acute awareness of what makes a certain moment uniquely teachable, an understanding of fortuitous chance, an appreciation of the liminal nature of the time during which students work to become physicians, and of the threshold potential for deepened understanding and growth. Above all, an awareness of *kairos* involves an ability to immerse oneself and one’s learners in an attitude of humanism and communion in order to spark reflection on individual patients and their challenges, values, perspectives, and lives. In this sense, *kairic* time is tightly linked with space, relationships, and communicative interactions. We previously proposed the critical importance of dialogue as an exploratory form of learning whose aim is an enhanced understanding of—and an openness to—the human dimensions of suffering, illness, and medical care. We also outlined the necessary conditions for creating space for reflection and dialogue in the education of physicians, namely, a place of safety, a moment apart from the usual hectic pace and cacaphony of clinical practice, and an awareness of change both in the learner and teacher. Recently, we extended this conversation to describe the creation of “dialogical moments” in busy clinical settings into which clinician teachers and learners may briefly step so that they may consider humanistic aspects of medicine. During these dialogical moments, the role of the teacher is not to lecture but to ask questions, pose paradoxes, illustrate contradictions, and to tell stories without endings in order to nudge learners into a questioning of implicit assumptions and a sense of wonder and curiosity about all
that is left unsaid between human beings in moments of vulnerability or loss. However, how do educators discover or create the “right moment” to intervene with a thoughtful question or a story without an end in order to spark a dialogue?

**Inviting Kairos**

*Kairic* moments in teaching become accessible in a confluence of space and time. The present is not just a point or a moment in a chronology of events but involves three modalities of action—expectation, attention, and memory—that occur concurrently and comprise human experience. In the present moment, we anticipate the future, we access the past through memory, and our attention remains in the present. *Kairic* time is time folding in on itself to allow access to the past, present, and future in a single moment. In this moment the experience of the *spatiality of time* changes from the linear to the deep. Time acquires a dimensionality and seems to expand. Ideas hovering nascent in the air, charged by relational events (e.g., a “teachable moment” in the clinic) seem, to those experiencing the moment, to coalesce into a “holy lighting of sparks” resulting in “peak experiences,” a moment of understanding or a new realization and elevation of thought and ideas. *Kairos* connotes *opportunity* where insights and wisdom are unexpected visitors. However, *kairic* opportunities must first be recognized and invited in before understanding is gained.

When these moments occur spontaneously they can be recognized in clinical teaching settings as moments charged with emotion that potentially change the course of learning and in which interlocutors (usually both teacher and learner) may perceive a slowing down of time. The moment is typically imbued with social connections between the interlocuters and imagined others (future and past patients, loved ones, colleagues, teachers). These moments, infused with social/relational connections, are liminal and instinctively meaningful. *Kairic* moments have an
intense anticipatory quality in which one or more people in the moment recognize the powerful quality of opportunity within an everyday activity. *Kairic* moments can be recognized as having occurred through the experience of “being in the zone,” where ideas seem to flow smoothly and easily. In positive psychology this is referred to as “flow.” Kairos explained in this way can appear arcane and begs the question: How is it possible to capture or indeed create those exceptional fleeting moments of opportunity seemingly sparked by divine inspiration?

The Aristotelian concept of *eudaemonia* (human flourishing) may offer some perspective. *Eudaemonia* embraces the quality of genius or divine inspiration and is translated literally as “good spirit.” The concept is central in Aristotelian ethics and political philosophy, along with *aretē* (virtue or excellence) and *phronesis* (practical wisdom). According to Aristotle, *eudaemonia* refers to the highest human good. Globally, indigenous cultures explain similar concepts as inspirational spirit or life force for the highest human benefit, for example, *uMoya* (in many indigenous South African peoples), *Prana* (life-giving force in Vedic Indian philosophical traditions), *chi* (vital force) in some Far Eastern traditions, and *Mino-bimaadiziwin* in North American Anishnaabeg traditions. Inviting Kairos unlocks the opportunity for human flourishing to occur. This involves expectation, maintaining “positive uncertainty”—the idea that change and ambiguity are inexorable—and accepting “the nonrational and intuitive side of thinking and choosing” to believe that such moments will occur. Some practices for inviting *kairos* may include:

- **Kairic dialogue.** In a kairic moment dialogue assumes an improvisational quality, and is tentative and situated in a context that is emergent, uncertain, and shifting. *Kairos* leads our attention to the present moment as one of becoming and opportunity and foregrounds expectation of a new state of things. Asking open-ended questions during ward
rounds or teaching sessions, such as, “What’s happening here?” “What stands out about this situation?” invites dialogue as participants are invited to compare whatever insights are sparked in the moment without a preconceived idea of what is correct or expected. This moment is precisely what we have meant elsewhere by the fleeting “dialogical moment,” in which one steps into exploratory dialogue and reflection.

- **Creativity.** It is increasingly recognized that creativity and logic are not mutually exclusive. While logical progression in comprehending a concept or process is linked to choronological time, the leaps of logic and the multidimensional, even erratic thinking that characterizes creative thought are distinctly *kairic*. Questions that stimulate unboundaried ideas may be asked, such as, “What would be your best guess in this situation?” “What would be a different ending to this story?” “How would you draw, dream, sing, or compose a poem about what is happening here?” “What would happen if we started from a different point or changed direction completely?”

- **Generativity.** *Kairic* moments are characterised by an air of generativity where ideas emerge easily and lead to other ideas. This has been described as the generative quality of metaphor that sparks creative “flow” and leads on to greater ideas. Juxtaposing seemingly disparate ideas by using metaphor in clinical or medical teaching contexts can create opportunities for new ideas and understanding and perspectives. How would heart surgeons’ training change if we looked at the heart as being the seat of the soul?

- **Imagination.** *Kairic* moments are ripe for engaging the imagination by exploring the first images, sensations, emotions, and associations that are sparked during these moments. Imagining is a multifaceted practice that involves engaging with the possible, the not-yet-possible, and the impossible (fantasy). Imagining facilitates access to states of mind
unbounded, untapped, and undefined by chronological time and invites new ways of seeing and knowing.

Fundamentally, conditions inviting *kairos* are identical to those inviting dialogue and reflection: a multiplicity of voices, a diversity of views, and an engagement of emotions, experiences, humor, and curiosity may unlock humanistic engagement in the profession of medicine. Other means of inviting *kairos* include:

- **Disrupting the linear.** Disruption is often perceived as inherently negative in settings where process, order, sequence, and structure are idealized. However, disruption is an essential aspect of learning and growth, and it is just this sort of disruption that might prompt the conditions for *kairos* and teachable moments. This may include the literal disruption of time, where an activity that requires a few minutes may be stretched out over an hour or more; altering the accepted sequence of an activity; changing the responsibilities and actions of a role players in a setting; and changing the space in which the activity usually occurs. These are all methods that will invite *kairos*.

- **Storytelling and narrative.** Eminent narrative therapist Michael White sees narrative as events linked in sequence across time according to a plot. This description alone is charged with the opportunity for *kairos*. Where did this patient’s story start and where will it end? Who are the main players and what is the plot so far? Can we predict an ending? White explains that there are dominant stories that are so pervasive, entrenched, and expected that they appear to be true. But in every story there is a spark of alternatives, of other possibilities or opportunities. Questions about how the dominant story came to be seen as true and how alternative stories survived below the surface may be uncovered will invite *kairos*. “What made it possible, with all the restrictions that
diabetes placed on your life, for you to run ultramarathons?” In terms of time, engaging with the patient’s narrative may introduce yet another form of time from antiquity—that of *aion*, often translated as “timeless eternity,” “the whole of life,” as well as “life’s lot.” Living with chronic illness, and in particular, mental illness, often alters one’s sense of time, and an astute clinician teacher may seize a *kairic* moment to explore the patient’s *aionic* time with all of its sense of boundless, Sisyphian struggle.

- **Where is the patient?** Centering the patient, or the patient’s perspective, in the teaching moment elevates the quality of the discussion by calling upon personal and factual references simultaneously. Asking questions such as, “Tell me, who is this patient when she’s not a patient?” “What kinds of obstacles has she encountered when trying to live well? Don’t guess…find out from her.” After a difficult interaction with a patient/patient’s family, one might say, “Wow, that was tough. What could we have done to help it go better?” “What are the priorities here?” In dealing with a patient with advanced disease struggling with multiple social obstacles to his health and well-being, one might say, “Let’s back up 10 years. Tell me a different ending to this story, one in which he thrives according to his wishes.”

- **Accessing embodied responses.** *Kairos* may be invited to create a teachable moment by the teacher’s asking students to notice their physical reactions to a situation and using their responses to dive deep into the moment. “What was your immediate physical response to what you saw or heard?” “What was your first experience in feeling this way?” “What thoughts, ideas, or emotions do you associate this physical reaction with?” “How does the way this patient holds herself have an impact on your thoughts, emotions, or ideas?”
• **Exploring moments of crisis.** Moments of crisis and danger alter the perception of time, which is often perceived as slowed down or accelerated. This altered perception and the emotional texture of crises are imbued with opportunity. The immediacy, urgency, and heightened emotional nature of these “critical incidents” or “teachable moments” magnify perception, augment the quality of time, and increase possibilities for opportunity, epiphany, and change.

**From Skills and Competencies to a Sensibility to *Kairos***

Admittedly, this way of considering time and the introduction of an obscure concept from ancient Greece appear to be a strange departure from the usual discussion of competencies, milestones, and entrustment. Our aim with this approach is to focus not on just observable outcomes but on what *goes on inside of and between* both teachers and learners. Although perhaps useful in assessing clinical skills, competency-based medical education has been criticized for an overly reductionist approach to complex human interactions and communication that occur in the context of clinical care. In counterpoint, we and others have argued for an exploration of the development of professional identity and an orientation towards the humanism involved in caring for others. This orientation embodies what Aristotle calls *phronesis*—practical wisdom—in which physicians see themselves as moral beings-in-the-world, with agency and a commitment to work for *eudaemonia*, the flourishing of the self and of humankind. In this sense, *phronesis* is coupled with *kairos*: practical wisdom provides an ethical orientation to the identification of *the right time* and to an educational intervention—ideally longitudinal in nature—that sparks dialogue, curiosity, and wonder.
From the standpoint of clinical teachers, we propose that an ability to stimulate reflection and dialogue on the human aspects of medicine and clinical practice involves not a competency but an orientation to one’s self, others, and the world. It involves a sensibility to the *kairic moment*, the fleeting instant that, if encountered with an attitude of curiosity and exploration, may result in life-long lessons—for both learners and those who teach them.

We would propose that part of faculty development—and indeed medical education itself—is the development of this *kairic* sensibility: a sensitivity to nuance, timing, and rhythm and a vigilance regarding the opportune moment to intervene to spark reflection on the human dimensions of medicine. Can “all comers” learn this? Probably not; nonetheless, a fundamental character of thoughtful educators is the perhaps naïve assumption that people—including ourselves—are capable of change.

What we are aiming for in medical education is an opening to this *kairos*—this “critical moment” in which one places one’s assumptions, taken-for-granted beliefs, and unconscious biases under a penetrating gaze that allows for a clearer perception of what is truthful or just. This is not just a set of skills or knowledge that is standardized and general; it is not an activity that may be deemed “competent” or “professionally entrustable.” It exists in the space in between knowledge, skills, observable acts, values, and competencies. It is a sense of knowing and understanding that fosters the identification of the right moment (albeit, often brief and fleeting) to prompt reflection and dialogue, to encourage the unique to be seen within the general, to capture a particular emotion, relationship, or circumstance that leads to a greater understanding of the human condition. The ability to engage in *kairos* is to unapologetically reach down and grasp a moment in time—as one would seize a fish in a quickly moving
stream—in order to stimulate new ways of seeing and knowing about human beings, their lives, and their thoughts and feelings at moments of greatest vulnerability.
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