

Emergent Properties of an Art Talent Environment: An Empirical Study of Young Artists' Experiences Within a Talent Development Program

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Abstract

This article presents a study regarding a school for young talented artists. Within this context and based on systems thinking and a holistic ecological approach to talent development, the researchers seek to identify emergent contextual properties that enhance talent development. The research question of the study was “Which emergent properties support and influence talent development in the context of the Danish Talent Academy (DTA)?” The study is based on interviews with six young artists within different fields of art and five instructors. Furthermore, 12 hours of participant observation were conducted. Through a generic thematic analysis, six broad categories describing different emerging properties of the environment at DTA were identified. The paper argues that knowledge about emergent properties can help organizations improve artistic talent development and presents two specific strategies: 1) the organization’s ability to orient itself towards the emergent properties occurring every day; and 2) the organization’s ability to assist young artists in learning to reflect upon how emergent properties, at a certain point in time and in a certain context, may further liberate their artistic potential.

Keywords: Emergent properties; young artist; Talent development; talent environment; living systems theory; holistic ecological approach.

Introduction

In Denmark, art (music, dance, literature, painting, film, etc.) is recognized as an important part of Danish culture and talented artists are recognized for their valuable contribution to society. Over the last couple of decades, increasing attention has been paid to the question of how cultural institutions and society at large can support artistic development. In 2018, the Danish Ministry of Culture launched a project to strengthen the focus on two themes related to this question:

1. Local Talent Environments.
2. Young Elite Career Development.

In keeping with the Local Talent Environments theme, the ministry wanted to support talent environment projects across the country to ensure that geography would not prevent young talented artists from blossoming. One of the institutions that received support was the Danish Talent Academy (DTA) in Holstebro (a town with 36,000 inhabitants in a rural part of Denmark). DTA is a youth art school where young artists ranging in age from 16 to 25 can cultivate and develop their artistic skills. DTA offers training within six different artistic fields, namely visual arts, design, dance, writing, musical theater, music, and film. DTA is also a stepstone school. The teaching is at an advanced level that prepares the young artists for entrance exams at a higher art academy. The school provides boarding facilities for the students, and most students attend DTA for two to three years. The vision of DTA (as stated on its home page) is to help young artistic talents unfold their creative potential, cultivate their curiosity, and become more knowledgeable about their own craft as well as other art forms. Further, it aims to explore and challenge the creative nerve of the students while providing a community where young artists can cultivate their passion and develop a professional approach to artistic expression.

Research question

This research project is a collaboration between researchers from Aalborg University, DTA, and the Ministry of Culture. Its aim is to focus on talent development from the perspective of talent environments. Inspired by recent research within the field of sport talent environments advocating a holistic ecological approach (Henriksen et al. 2010; Henriksen 2015; Storm et al., 2020) and supplemented by systems thinking and ecosystem ideas, the project sought to identify properties in the environment at DTA that appeared to enhance talent development. This objective led to the following research question:

RQ: Which emergent properties support and influence talent development in the context of the Danish Talent Academy (DTA)?⁶

Before we present our findings, we outline the status of contemporary talent research, explain systems thinking and living systems theory and present the holistic ecological approach advocated by living systems theory.

Talent research domains

In her Ph.D. thesis from 2015, Storm summarizes the current state of talent research and presents a model stating the interrelationship and tensions between three *overarching domains*. In this respect, her model refines existing studies by incorporating a third domain (the cultural domain) to supplement the two dominant domains of talent research described below.

The first domain is *Nature*, or the biological domain. Within this domain, talent is perceived as an innate quality; thus, a definition of talent often used within this tradition is “The sum of a person's abilities — his or her intrinsic gifts, skills, knowledge, experience” (Michaels et al. 2001, p. xii). An ability is viewed as something that an individual either does or does not possess. From this domain emerges research in fields such as gifted children (Porath, 1996; Claxton & Meadows, 2009, Porath, 2013), gifted education (Periathiruvadi & Rinn, 2012; Salakhova et al., 2020) and search and selection theory (Swiatek, 2007). In popular use, advocates of this domain have introduced personality tests in sports and business and produced a range of self-development literature (Gergen, 2010).

The second domain is *Nurture*, or the psychological domain. It likewise has an intra-individual perspective. This domain advocates a strong focus on constant learning and training throughout life. Talent is viewed as something that emerges through hard and dedicated work. An often-used definition is “Talent = competence [knowledge, skills and values required for today's and tomorrow's job; right skills, right place, right job, right time] commitment [willing to do the job] contribution [finding meaning and purpose in their job]” (Ulrich & Smallwood, 2012, p. 60). Areas of research within this domain include expertise, expert performance and deliberate practice (Ericsson & Pool, 2016), talent programs and onboarding research (Snell, 2006; Davila & Pina-Ramirez, 2018), and performance management research (Aguinis et al., 2012).

The third domain is *Culture*, or the social domain. It has a strong situated and contextual focus. Research interest within this domain only began to surface around 2005; it is still by far the smallest domain within talent research. Research centers around contextual properties that create the possibility for talent to emerge. A commonly used definition of talent in this domain is that “ability or talent is characterized as a set of functional relations distributed across person and context, and through which the person-in-situation appears knowledgeably skillful. In other words, ability and talent arise in the dynamic transaction among the individual, the physical environment, and the

⁶ Capra and Luigi (2014: 154) define *emergent properties* in the following way: “Novel properties arise when a higher level of complexity is reached by putting together components of lower level complexity. The properties are novel in the sense that they are not present in the parts: they emerge from the specific relationships and interactions among the parts in the organized ensemble.”

sociocultural context” (Barab & Plucker, 2002, p. 174). Examples of research in this domain include dual-career research (Baron-Thiene & Alfermann, 2015), high-performance culture (Aalberg & Sæther, 2016), mentoring programs (Martindale et al., 2007), and holistic ecological approaches (Henriksen, 2010; 2011; 2020; Csermely, 2013).

This study is inspired by research within the cultural domain, as we are primarily interested in the emergent environment in which young people become artists. To illuminate the cultural domain presented above even further, we draw on systems thinking and living systems theory.

Systems thinking and living systems theory

In the 1940s, Ludwig von Bertalanffy (1901-1972) began to develop general system theory, aiming to transcend the frontiers across a wide range of disciplines, namely physics, chemistry, biology, psychology, and the social sciences. His basic idea was that the systems analyzed in these different branches share multiple features that can and should be the subject of a science of systems as such. To Bertalanffy, a system should be understood not as a concrete thing but rather as an organized web of relations across the elements of the system, i.e., a pattern. Systems can thus be regarded as organized complex patterns or simply organized complexity, and the existence and special characteristics of a system are more a function of its particular organizational than the nature of its individual parts (Bertalanffy, 1968).

Another important figure in the development of systems thinking was Gregory Bateson (1904-1980). Bateson's work points in many different directions, but an important aspect in this context was his work on systemic ecology. Bateson reminded us that we can never position ourselves outside systems and that we are constantly delimiting them. All that we are, we are in relation to an ecological system. In his comprehensive essay collection “Steps to an ecology of mind,” Bateson presented the notion of systemic wisdom as a general understanding of the systems of which one is part: “Systemic wisdom, I take to be the knowledge of the larger interactive system – that system which, if disturbed, is likely to generate exponential curves of change” (Bateson, 1972, p. 433).

Inspired by the works of von Bertalanffy and Bateson, Urie Bronfenbrenner (1917-2005) argued that traditional studies of children in unfamiliar laboratory environments with one other person, usually a stranger, were ecologically invalid, as they did not pay attention to the context of the child. Bronfenbrenner argued that there are multiple aspects of the unfolding life of a child that interact with and affect the child. He endeavored to look beyond individual developmental factors, considering the wider factors influencing development. To this end, he proposed the ecological systems theory (Bronfenbrenner, 1979), which states that dynamic interactions within an ecological system have a constituting influence on personal development.

More recently, drawing on the work of Bertalanffy, Bateson, and Bronfenbrenner, Capra and Luisi (2014) described the interconnectedness of living systems theory based on the following characteristics:

1. *Inherent multidisciplinary*. Healthy and robust ecosystems are characterized by diversity, complexity, and an abundance of different species. Thus, systems are by definition complex and multidisciplinary, as they consist of many different components with very different qualities.
2. *From objects (entities) to relationships*. What we call a part is merely a pattern in an inseparable web of relationships. Systems thinking is less preoccupied with the individual parts of the system, focusing instead on what emerges when parts connect.
3. *From measuring to mapping*. When moving from objects to relationships, the traditional insistence of the natural sciences on measuring, counting, and weighing all objects is challenged, for how should a relationship be measured? Instead, we must strive to understand, interpret and describe the system in its entirety. Objects can be counted or measured, but relationships can only be mapped.
4. *From structure to process*. In 1909, the American philosopher William James stated that “The essence of life is its continuously changing character.” Structures are descriptions of stagnant “dead” phenomena. However, living systems are always changing. Therefore, systems thinking

presupposes a shift from a description of "what is" to a focus on "what is happening." All living systems are constantly changing. Thus, to understand a living system is to understand the continual flow of matter through the system, even as its form is maintained: There is growth and decay, regeneration and development (Capra and Luisi, 2014: 80-81).

Holistic ecological approach

Henriksen et al. (2010; 2011) took an important step towards redirecting the focus in talent development from the intra-individual perspective of talent to the context and the ecology in which talent emerges. These researchers investigated successful athletic talent development environments and paid considerable attention to the organizational context of the environment. In their research (Henriksen et al. 2010; 2011; 2020), they employed a holistic ecological approach to explore talent environments, incorporating talent development environments as well as other environments that talented young people encounter. This could be family, school, dual career, etc. In these environments, the researchers argue that learning relations, like coaches, mentors, peers or other important role models play an important part in the development of the athlete. Thus, working with talent development is not just about designing the best "talent school" but understanding the totality in which talent unfolds.

The framework presented above (systems thinking, living systems thinking, and the holistic ecological approach) constitutes the basis for our enactment with DTA. In the following paragraph, we present the methodological approach adopted in this study.

Methods

Six young artists within different fields of art (music, musical theater, novelist, dance, painting) and five instructors, also from different fields, were randomly sampled by the director of the school for the interviews. Only expectations were an even share of gender and fields of art, and a minimum period of stay at the school of six months. Inspired by the holistic framework of Henriksen et al. (2010; 2011), the interviews covered both the artistic and the non-artistic domains as well as the interplay between the two domains. We further oriented the research to both the artistic micro-environment (the environment where the young artists spend a significant portion of their daily life) and the macro-environment (social settings that affect but do not include the young artists). Guidelines for the semi-structured interviews (Kvale, 1996) were developed. Questions were inspired by the Interventive Interviewing Framework developed by Karl Tomm (1987a; 1987b; 1988) to help orient the study towards the pattern of connections across the emerging properties in the various contexts. This framework draws significantly on circular questioning techniques as opposed to more linear question-and-answer-conversations. In the interviews relations, possible futures, contextual markers are highlighted through the techniques. All interviews lasted approximately one hour.

In addition, 12 hours of participant observation were conducted, with the observers seeking to capture expressions, atmospheres, and their own reflective and affective reactions when encountering the artistic environment (Gherardi, 2018). The strength of ethnographic research is the opportunity to position individuals in a specific social setting, placing them in a context where action takes place (Van Maanen, 2010). This method enabled observation of the environment under study and gave the researchers a profound understanding of the culture (Tinggaard, 2006). In some situations, the researchers physically participated in the creation of art by commenting on stage performances, singing, dancing, etc. In other situations, they primarily observed the emergence of art. All observations were recorded in field notes and diaries and subsequently rewritten as accessible data.

Engaging with data - *Interpreting "the emergent"*

All interviews and observation materials (notes and diaries) were transcribed and coded, and a generic thematic analysis was applied. Both authors used an inductive approach to search for themes and provide preliminary codes of both the interview data and the field notes. The main inspiration for this coding was the four-phase matrix developed by Glaser and Strauss (1967): conceptualization of

the overall theme, rough division of data into general categories, division into subcategories, and further division into finer categories. Data emerged and were sorted into 6 broad categories, 24 subcategories, and 90 fine categories.

Revsbæk and Tanggard (2015) describe how researchers engage with emergent qualitative data over time. They state that observing how different parts of various interviews convey diverse significance to the listening researcher at different times can become a method of continuously unfolding the empirical material in a reflexive, breakdown-oriented process of analysis. This has to some extent been our approach to the interview and observation data collected at the DTA. We re-engaged with the data in a back-and-forth movement while remaining observant of emergent patterns coming together as “emergent properties” over time.

Results

In this section, we present the results of our analysis. These findings fall into six broad categories describing different emerging properties of the DTA environment that seem important to the development of the young artists. However, a dilemma emerges that must be discussed before the results are presented. The categories described below arose from our analysis of the stories the young artists and teachers at DTA shared with us. However, presenting them in the format of a research article is in itself problematic. As stated multiple times in the text, we view these categories as emergent properties, i.e., qualities that appear due to the patterns of interaction at DTA. These qualities are in constant flux, that is, continuously being re-acted, re-negotiated, and re-created; however, when we describe them in this section, they come across as well-defined, isolated, and stable fixtures that represent a formula for success. In this respect, our description should be understood as a still life depicting perpetual movement. We do not describe something “that is” but rather something “that was,” as properties evolve constantly. In our view, this in no way disqualifies our study or our results. This is simply a basic condition in qualitative research (Brinkmann, 2013). Still, it is important to remember throughout this section that the findings represent a systemic motion that is momentarily put on hold. We are not measuring the effects but rather mapping the environment in order to identify systemic configurations that occur repeatedly. We shall return to this topic in our discussion.

To discover the passion of doing art

Artistic talent is often perceived as something innate and recognizable almost from birth. The prime (and often used) example is Mozart, who started composing and giving concerts at the age of six. However, the young people in our interviews shared quite different stories of their artistic development with us. Although many, from an early age, felt an attraction towards activities different from most of their peers, none described this feeling as a specific calling to a certain artistic method of self-expression. Rather, most told stories of more or less stumbling onto their artistic trajectory. Several spoke of how a year at boarding school during their high school period opened their eyes to a specific artistic field, while others described how their interest developed slowly over time:

So, I actually do not really know how I found out about that talent thing. I just think like... It has always been like that when I got bored, I sat down and began to draw, and then people were like ‘you are actually pretty good’ - or something like that. (S1, interview, November, 20, 2021)

Furthermore, many were drawn into the artistic environment due to their social relations. Thus, many of the interviewees stated that their initial introduction to the artistic field was through friends who already were part of that environment:

I had just started my senior year and there was not much going on in my life. Then I became friends with this guy named Adam, who was very musically and artistically gifted and did a lot of cool stuff. He introduced me to DTA and I decided to apply the following year. (S3, interview, November, 20, 2021)

In the quotes above, the young artists describe talent as a quality that emerges through the interplay between personal, innate abilities and social relationships. Of course, talent is rooted in the

ability and artisanship of the individual, but the students oppose the idea of artistic talent as an unchangeable innate drive towards a specific mode of expression. In fact, some explained that they changed their subject of study during their time at DTA. This way of understanding the concept of artistic talent is also an important driver behind one of the important pedagogical principles at DTA, which states that no student should only be taught in one subject. Thus, cross-disciplinary activities are an important part of the talent development programs at DTA – a line of thought we will return to later in this section.

To be taken seriously

It is one thing to be artistically interested. It is quite another to openly announce an intention of pursuing an artistic career. Almost all the young people we interviewed shared stories of doubt and insecurity. Many described how their families were quite supportive of their interest when they were younger (“she always draws – it is such a delight to see her with her pencil and that concentrated look in her eyes”). However, this unconditional endorsement faltered when they grew older and choices regarding their future professional lives and careers were on the horizon. In this regard, most of the young people primarily perceived their artistic skills as a leisure time activity, and for some, this perception extended to feelings of guilt and shame when they declared their decision to enroll in DTA. This is probably why almost everyone highlighted the seriousness with which the artistic subjects are approached as one of the most important features of DTA. In the world of sports and certain art forms (e.g., ballet), talent environments are often available even for very young children. However, most of our respondents had never experienced anything like this before, as very few structured environments exist for 10 to 15-year-old visual artists, rhythmic musicians, or aspiring poets. If a young person’s primary experience is that their closest family members, while endorsing their interest, do not ultimately take it seriously, it becomes quite difficult for them to perceive their own craftsmanship from a serious perspective.

So, it provides you with a huge boost of self-confidence to be part of this [DTA]. The fact that you do not need to go around feeling unsure of yourself; wondering what others think, about what you do and fearing that people might judge you. Meeting other artists meant to me that I dared to take myself seriously and dared to prioritize my time and energy working on my art. It also helped me to make some difficult decisions about my life that allowed me to prioritize my art even higher such as leaving home and moving to this place, taking a part-time job and begin to live on a rock in order for me to be able to spend even more time here at DTA. (S4, interview, November, 21, 2021)

To work hard

Apart from the boost in self-confidence, the seriousness with which art is perceived at DTA is also reflected in the young people’s work ethic. Our interview subjects had highly varied experiences in primary school. Some were straight-A students while others barely managed to get by, primarily due to a pronounced lack of interest. However, they all nearly unanimously referred to the work ethic at DTA as very different from anything they had previously experienced. Furthermore, they reported that the way they work now is much more passion-driven and indeed does not feel like work compared to school.

The first thing I noticed when I started was how hard everybody was working and I thought it was SO cool! Really uncompromising, like “oh let’s just stay in this room for eight hours if we have to in order to finish up.” That was just amazing. (S2, interview, November, 20, 2021)

As illustrated in the quote above, talent development is also about hard work. Neither the teachers nor the students believe that artistic talent is a pure innate construct that is merely waiting to emerge from unique individuals. Talent is very much something that is trained. In that respect, the young talented artists perceive their skills in much the same way elite athletes do: Talent is about willingness to make sacrifices and choose another night in the atelier or the dance studio rather than spending time with friends. It can be fucking frustrating that you cannot go to a high school party,

because you have a rehearsal the next day at a show, and you always have something to do. I have three hours a week where I do nothing. (S6, interview, November, 21, 2021)

In this respect, the environment helps the students to stay on track, as all of their classmates are similarly dedicated. Many of the students we interviewed said that they found the motivation to continue rehearsing by observing their peers, admiring their dedication and the work they produced.

To be able to experience art

This headline may seem obvious: When does an artist not experience art? However, all of the young people we interviewed and talked to during our observatory stay at DTA emphasized the importance of the multi-faceted artistic environment at DTA. We mentioned above that proximity to other aspiring artists motivates everyone to perform at their highest level. Most students at DTA are accustomed to being the most skillful individual at their craft in their local environment; however, at DTA, they are surrounded by peers who are just as competent as themselves. Furthermore, art is everywhere at DTA. All students are confronted with a plethora of artistic expressions from the moment they awaken until they go to bed. The main building is colorful, full of light from the big windows and filled with inspiring small cozy corners that attract social and reflective interaction. All walls are plastered with paintings, sculptures are everywhere to be seen, and young people can be seen everywhere gathering, caught up in intense conversation or practicing together. The students at DTA do not just experience art; their lives are imbued with art.

Meeting others your age who dare to say, “This is important. This is what I want. It meant that I began to reflect on my own situation and my own motivation. Seeing what they can do is so inspiring. Maybe I was the best at my old dance school, but I am certainly not here because everybody is so talented. Nevertheless, this is the greatest part of it all since we push each other to get even better. (S2, interview, November, 20, 2021)

Talent development is not merely about practice (although it is a crucial component in every talent development program). To become an artist, one must experience art, embrace art, and live art. Therefore, most of the students at DTA have made the decision to leave their family and childhood environment to live at DTA for several years until they can apply for a scholarship to one of the prestigious art colleges.

To embrace interdisciplinarity

Another important aspect of DTA, related to the point mentioned above, is that the talent development program does not focus on one specific art form but connects multiple artistic forms of expression. A dancer might rehearse next to people from the musical line, eat lunch with a writer, and share a room with a sculptor. Talent development is often associated with the metaphor of 10,000 hours of practice (Gladwell, 2008). This understanding of talent development aligns with the nurture perspective presented earlier. From this perspective, talent development refers to being absorbed in the practice of one’s special niche within a given field, continuously improving one’s skill level through repetition. At DTA, and in line with the holistic perspective, artistic talent is considered to emerge through relationships and in an environment that provides space for different perspectives and thus different stimuli.

Our school arranged a talent event, where people from all over Denmark came, and we were all forced to work with actors, doing some acting or musicians, making music. I think it is quite wonderful with that kind of experience. Before I started here, I think I was rather narrow-minded. DTA initially helped to open my horizon within visual art, but now it is like that for the whole world of art. Dance, music, writing and acting. And, I do believe that it makes me a better painter. (S3, interview, November, 21, 2021)

Furthermore, the holistic approach practiced at DTA is important for another reason. Talent development is not just about skill development. The school is highly conscious of the need to help young people develop as whole human beings. Artistic talent unfolds through the artist and is

inseparable from the person; it is never just the hand that paints or the body that dances. Thus, personal development is artistic development. Therefore, broadening the horizon of these young talented artists, opening their eyes to other perspectives and different worlds, becomes an important part of the scaffolding procedure.

To be seen by others

As mentioned several times, the approach to artistic talent development at DTA is very much about social and contextual relations. At DTA, one does not become an artist by sitting alone. Above, we have described how artistic skills are practiced in a social context. However, practice is not everything. Artists are typically driven by the opportunity to share their art with other people. A dancer rehearses for a show viewed by an audience; a writer struggles to find the exact word for a poem so that other people will read and (hopefully) be moved by their words. Art is founded on the relationship between the creator and the observer. The work of the students is constantly evaluated by the teachers and their peers, but another important part of the prospering environment is the enhanced focus on artistic presentation. As mentioned earlier, paintings, sculptures, and other works of art adorn many of the empty spaces at the school, but these are primarily viewed by students and teachers. Thus, DTA is constantly engaging with external partners to provide its students with opportunities to present their art to a broader audience. Young artists work with professional theater troupes, explore opportunities for displaying in real art galleries, or tour the country giving concerts in various music clubs.

Sometimes, the things we do, a drawing exercise or something like that, when we finish it just ends up lying on my table. It does not really go anywhere. That is why I think it is so cool when we do a vernissage or set up a musical or something. That is when you really feel that you get to use your skills, when others see it I mean. (S3, interview, November, 20, 2021)

As Bateson writes, “information – the elementary unit of information – is a difference which makes a difference” (Bateson, 1972). Thus, in order for artistic talent to unfold, an artist needs an audience who will provide information. An old systemic saying states that *you can never know what you have said until someone responds*. In the same way, the developing artists need the reactions of others stemming from their artistic work to begin to grasp what they have created and what is still missing. Art does not become art until it is perceived by others, as it emerges through the artist/work of art/audience relationship.

Discussion

Our study provides insight into emergent properties that are highly likely to be present in many art talent environments in various shapes and forms. However, we by no means intend to claim that the list is exhaustive. Furthermore, it is important to remember that properties form different relational networks in every systemic encounter, meaning that the constituent qualities of a specific environment will express the particular systemic relationship of that environment’s properties. Finally, living systems are constantly in a state of becoming. A system never stays the same; rather, it is constantly changing due to its interactions with its surroundings. Therefore, the properties identified in this study, as mentioned at the beginning of our results section, should not be perceived as a stable and universal answer to the question, “Which environmental properties enhance art talent?” as they are in fact volatile and context-dependent. That said, our interviews indicate how important these properties are to the development of the young people we have met. Thus, we propose that the qualities expressed by these emergent properties could be of value for talent development organizations within art (and possibly other fields as well). It is thus important to understand the unique qualities of these properties and the commonalities that seem to recur across our six categories. Such commonalities might inform us about new approaches to talent development.

First, all categories contain a relational quality. Although some categories are obviously relational, such as “To be seen by others” and “To be taken seriously,” while others are (at first sight) more individual properties, such as “To work hard” or “To discover the passion of doing art,” all stories are about relations – about becoming with and through others. In this respect, our mapping of the talent environment at DTA opens an avenue for a relational understanding of talent. Instead of perceiving talent as an innate property of the individual that is nurtured and enhanced through

tremendous effort, we advocate for an understanding of talent as a complex quality that unfolds in a web of relations. Talent development is a relational activity requiring cooperation. As Lave and Wenger (1991) argue in their influential work, learning should be understood as an integrated part of practice. Lave and Wenger advocated a shift in the analytical focus of learning research from the individual as the focal point of all learning processes to learning as a process of participation in communities of practice. Their contribution facilitates a decentered learning perspective: Talent resides not only in the talented youngster but also in the entire community and learning stems from continuous interaction and participation. Every member of a community of practice is simultaneously a contributor and a learner.

Furthermore, our findings illustrate the importance of learning facilitation. The quote “I never teach my pupils, I only attempt to provide the conditions in which they can learn” is often ascribed to Albert Einstein. Regardless of whether he truly uttered these words, the point is certainly valid in one way or another. In our interviews, the young artists often mentioned the teachers but seldom referred to traditional teaching experiences when they described the paths of their artistic development. This is not to say that we believe teaching does not matter. DTA is filled with brilliant, knowing, creative and inspiring teachers. However, our interview data indicate that the teachers at DTA facilitate learning in many different ways. Of course, they teach, lecture, and supervise, but (at least) equally important, they participate in creating and sustaining an environment for continuous development, an environment that allows the young talented artists to help each other learn and develop through innumerable interactions of reciprocal influence. In this way, the system (not the individual teacher) becomes the “primary educator.” The young artist learns through their engagement in the learning system, creating a non-linear and self-sustaining learning path.

Our interviews and the success rate of applications from DTA students to higher art academies in Denmark indicate that DTA is already very competent in creating a high-performing art talent-enhancing environment. However, based on our empirical findings and our experience as researchers and organizational consultants, we end this article by proposing two areas that DTA (and possibly other talent development organizations) can develop even further in their attempt to support the artistic talent development of their students. We offer the following proposed areas of focus:

1. The ability to *orient* the organization towards the emergent properties occurring every day.
2. The ability to assist the young artists in *learning to reflect upon* how emergent properties, at a certain point in time and in a certain context, may further liberate their artistic potential.

Ad. 1) A context-dependent orientation is an orientation towards differences, movement or changes, patterns that connect, and interconnections. This *orientation* is about experimenting with and challenging how we perceive. The stories revealed in our data highlight passion and untamed bursts of energy that allow for learning to suddenly occur. We propose that DTA beneficially could strengthen their ability to strategically *map and enhance* the emergent properties to produce talent environment routines, increasing the possibility of young people displaying their artistic potentialities at DTA. In other words, students should make themselves available for these bursts of energy that suddenly occur when analyzing constituent moments with questions like, “What is happening?,” “Who is present?,” “What is performed?,” “Why did the situation, the moment, touch us and move us?,” etc. Orienting the organization towards emergent properties requires a willingness to see beyond current methodologies. This can be achieved by asking questions about the emergent properties and engaging in continuous dialogues with others (students, teachers, managers, external stakeholders, etc.) to understand and enhance the real-time learning opportunities that these properties present for everyone. However, dialogue alone is not enough. The organization must also develop the capacity to act upon the insights brought forward by these dialogues, changing their modus operandi to align with the emergent properties. The ability to *orient* the organization towards these properties calls for an agile organization. As mentioned above, living systems are constantly changing – the only constant being changeability. Thus, organizations must be open and willing to change practices, habits, and beliefs to remain a creative and inspiring force, something that often becomes increasingly difficult as organizations mature (Hamel & Zanini, 2020).

Ad. 2). Apart from developing organizational awareness, DTA could strengthen its ability to assist its students – the young talented artists – in raising their awareness of the emerging properties that could constitute an ideal frame for their artistic development. However, as these properties are emergent by nature, and thus transitory and ever-changing, students must develop *discernment*, or the ability to be *self-reflective*, in order to understand how and why their talents seem to flourish under certain circumstances. The prospering talented artists could be trained to analyze a specific rewarding situation by asking questions about their own sense of being within the system. Such questions touch upon different perspectives of the “I” (the individual) and the “we” (the system) and fall into the following categories. *Self-reflective*: “What specific circumstances led to this breakthrough or insight and what did I learn from this incident?” *Self-sensing*: “How does my body communicate the sensation of the situational interplay? What contextual factors seem to trigger this bodily sensation?” *Social-intelligent*: “How do the surroundings and the people around me contribute to the experience?”

Conclusion

This study contributes to the extensive research on talent development by examining artistic talent development from a holistic ecological perspective. We searched for patterns and interconnections in the environment which constitute a web of relations that unfolds around these young people as they strive to develop and discover their personal “voice of expression” as artists. We call these patterns emergent properties. Based on our analysis, six emergent properties that *support and influence the talent environment* for young artists are identified:

1. *To be able to discover the passion of doing art*, 2. *To be taken seriously*, 3. *To work hard*, 4. *To be able to experience art*, 5. *To embrace interdisciplinarity*, 6. *To be seen by others*.

In our discussion, we look at commonalities across the six properties and emphasize that they all revolve around relations and patterns that connect. Finally, we point towards two areas in which our case organization could enhance its ability to develop young artistic talents by actively using knowledge about the nature of emerging properties to create an optimal environment for learning and development.

Further studies

In our next article we look at the role of organizations in supporting the possibility of these emergent properties to occur. A balance between control and freedom.

References

- Aalberg, R.R., & Sæther, S.A. (2016). The talent development environment in a Norwegian top-level football club. *Sport Science Review*, 25(3-4), 159-182.
- Aguinis, H., Gottfredson, R.K., & Joo, H. (2012). Using performance management to win the talent war. *Business Horizons*, 55(6), 609-616.
- Barab, S.A., & Plucker, J.A. (2002). Smart people or smart contexts? Cognition, ability, and talent development in an age of situated approaches to knowing and learning. *Educational Psychologist*, 37, 165–182.
- Baron-Thiene, A., & Alfermann, D. (2015). Personal characteristics as predictors for dual career dropout versus continuation – A prospective study of adolescent athletes from German elite sport schools. *Psychology of Sport and Exercise*, 21, 42-49.
- Bateson, G. (1972). *Steps to an ecology of mind*. Chicago: University of Chicago Press.
- Bertalanffy, K.L. von (1968). *General systems theory: Foundations, development, applications*. Brazillier.
- Brinkmann, S. (2013). *Qualitative interviewing*. Oxford University Press.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Harvard University Press.
- Capra F., & Luisi P.L. (2014). *The systems view of life*. New York: Cambridge University Press.
- Claxton, G. and Meadows, S. (2013). Brightening up: How children learn to be gifted. In T. E. Balchin, B. E. Hymer, & D. J. Matthews (Eds.), *The Routledge international companion to gifted education* (pp. 27-33). Routledge/Taylor and Francis Group.
- Csermely P. (2013) The Appearance and Promotion of Creativity by Various Levels of interdependent Networks. *Talent Development and Excellence*. 5(1), 115–123.
- Ericsson, A., & Pool, R. (2016). *Peak: Secrets from the new science of expertise*. New York: Houghton Mifflin Harcourt.

- Gergen, K. J. (2010). The acculturated brain. *Theory and Psychology*, 20(6), 795-816.
- Gherardi, S. (2018) Theorizing affective ethnography for organization studies. *Organization*, 26(6), 741-760.
- Gladwell M. (2008)**. *Outliers: The story of success*. Little& Brown.
- Glaser, B., & Strauss, A.L. (1967). *The discovery of grounded theory*. C Aldine.
- Hamel, G., & Zanini, M. (2020). *Humanocracy: Creating organizations as amazing as the people inside them*. Harvard Business Press.
- Henriksen, K. (2015). Developing a high-performance culture: A sport psychology intervention from an ecological perspective in elite orienteering. *Journal of Sport Psychology in Action*, 6(3), 141-153.
- Henriksen, K., Stambulova, N. and Roessler, K.K. (2010). Successful talent development in track and field: considering the role of environment. *Scandinavian journal of medicine and science in sports*, 20, 122-132.
- Henriksen, K., Stambulova, N., & Roessler, K. K. (2011). Riding the wave of an expert: A successful talent development environment in kayaking. *The sport psychologist*, 25(3), 341-362.
- Henriksen, K., Storm, L.K., Kuettel, A., Linnér, L., & Stambulova, N. (2020). A holistic ecological approach to sport and study: The case of an athlete friendly university in Denmark. *Psychology of Sport and Exercise*, 47, 101637.
- Kvale, S. (1996). *Interviews: An introduction to qualitative research interviewing*. Sage.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Learning in doing. Cambridge University Press.
- Martindale, R.J., Collins, D., & Abraham, A. (2007). Effective talent development: The elite coach perspective in UK sport. *Journal of Applied Sport Psychology*, 19(2), 187-206.
- Michaels, E., Handfield-Jones, H., & Axelrod, B. (2001). *The war for talent*. Harvard Business School Press.
- Periathiruvadi, S., & Rinn, A.N. (2012). Technology in gifted education: A review of best practices and empirical research. *Journal of Research on Technology in Education*, 45(2), 153-169.
- Porath, M. (1996). Narrative performance in verbally gifted children. *Journal for the Education of the Gifted*, 19(3), 276-292.
- Porath, M. (2013). Epistemic beliefs and education for talent development: Learning from students. *Talent Development and Excellence*, 5(1), 65-74.
- Revsbæk, L., & Tanggaard, L. (2015). Analyzing in the present. *Qualitative Inquiry*, 21(4), 376-387.
- Salakhova, V.B., Pryazhnikova, E.Y., Litvinov, A.V., Vasyakin, B.S., & Zasova, L.V. (2020). Talent and giftedness: The facets of development and research mechanisms. *Talent Development and Excellence*, 12, 127-142.
- Snell, A. (2006). Researching onboarding best practice: Using research to connect onboarding processes with employee satisfaction. *Strategic HR Review*, 5(6), 32-35.
- Storm, L.K. (2015). Talent development in Scandinavian elite sport as seen from a cultural perspective. *PhD Thesis*. University press of southern Denmark
- Storm, L. K., Christensen, M.K., & Ronglan, L.T. (2020). Successful talent development environments in female Scandinavian Handball. *Scandinavian Journal of Sport and Exercise Psychology*, 2, 16-25.
- Swiatek, M.A. (2007). The talent search model: Past, present, and future. *Gifted Child Quarterly*, 51(4), 320-329.
- Tanggaard, L. (2006). Situating gendered learning in the workplace. *Journal of Workplace Learning*, 18(4), 220-234.
- Tomm, K. (1987a). Interventive interviewing: Part I. Strategizing as a fourth guideline for the therapist. *Family process*, 26(1), 3-13.
- Tomm, K. (1987b). Interventive interviewing: Part II. Reflexive questioning as a means to enable self-healing. *Family process*, 26(2), 167-183.
- Tomm, K. (1988). Interventive interviewing: Part III. Intending to ask lineal, circular, strategic, or reflexive questions?. *Family process*, 27(1), 1-15.
- Ulrich, D. and Smallwood, N. (2012). What is talent?. *Leader to leader*, 63, 55-61.
- Van Maanen, J. (2010). A song for my supper: More tales of the field. *Organizational Research Methods*, 13(2), 240-255.

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