

Play, Learning and Creativity

Syllabus 2020 – v4 | Organized by the Interacting Minds Centre & PLAYTRACK

The course is a multidisciplinary introduction to play, learning, creativity and the relationships believed to exist between them.

It is widely assumed that play facilitates learning and stimulates creative thought and behavior in a range of different ways. Yet, historically, play and creativity have been difficult entities both to define and to approach with various forms of rigorous methodology. Throughout the course, we will attempt to understand why humans and a narrow selection of other highly intelligent social species play; e.g. what forms play take across times, places, and ages, and consider the effects play may have e.g. on learning and creativity. The course mainly focuses on literature on play, learning and creativity from multiple disciplines such as biology, psychology, and anthropology, but also contains a multidisciplinary introduction to a range of different research methodologies, e.g. psychological lab- and field based experiments, participant observation, and interviews.

Course Contacts

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Study regulations

<https://kursuskatalog.au.dk/da/course/100071/Play-Learning-and-Creativity>

Teaching times (unless otherwise specified)

Classes Monday's from 08.15-12.00 in 1483 – 228

Please refer to the lesson overview for exact teaching times for each week. Note that week's which indicate a 3 hour class will begin at 08.15. We have shortened some of the classes to accommodate individual feedback and support for your portfolio assignments.

Readings

There is no textbook to purchase for the course. Most readings are taken from journals, online sources, or books. For journals and online material, the references are given below, and the material should either be available directly online, or via e-journals through AU library. When using literature links in this document, please make sure that you log-in to the AU library system beforehand to allow you to access the resources.

Some of the readings might be in formats that are new to you and we are aware that it can be challenging sometimes to know what to get out of a new format. Try engaging with new formats with an open mind. Please reach out to us, if you are feeling overwhelmed. You can do this either directly (see contact details above) or by sharing your confusions/struggles in the course [padlet](#).

There will be also guided questions for some of the readings to help you navigate them and context information to provide you with some insight about the perspective the given reading is taking.

Optional Further Reading & Resources

These are articles, texts or websites that are available for further reading if you are particularly interested in a subject and want to delve into it in more detail. There is no expectation that you visit these pages.

Spaces for sharing open questions, wonderings, and confusions

Padlet 1: Playcourse wonderings & open questions – *Available on Blackboard*

Puzzled by something? Or struck by something that is mentioned in the readings? We would like to provide you with a space where you can share your questions and puzzles that you encounter throughout the course. Your sharing can also aid us in knowing what to revisit or explain in more depth during classes.

Padlet 2: Exam related questions – *Available on Blackboard*

Exams can be a daunting endeavour and especially when encountering a new format. We acknowledge that this is especially the case for this IV-course, since all of you come from different personal and academic backgrounds. Whilst some of you might submit for the first time in English, others might write about experimental research for the first time. We have created some workshops to support you through this journey, but would also like to offer you a forum where you can ask questions specifically about the exam.

Please note that both *padlets* are set to anonymity to allow for a safe space to ask questions.

Midterm evaluation and providing feedback and input to the course

The **Midterm evaluation** is an important opportunity for us to gain insights from you about different aspects of the course. Based on your contributions to the evaluation, we will learn about what is working well in the course, what could be extended upon, and which aspects might need some adjusting. The process will be separated into two parts. First, we would like to ask you to fill in an anonymous form to ensure that everyone can voice their thinking individually. Second, we will have an open dialogue in class, where we will also address ways on how we plan to adjust the course based on your feedback.

Midterm Evaluation will become available on the 5th of October at 11.00 on blackboard ([Link](#)). **Please fill in the form by the 12th of October at 16.00.**

Additional support available and opportunities for skill building

Based on last years' experience teaching this course, and the feedback we received from students taking the course, we have included a set of resources to aid you in your learning and your assignments.

Throughout the course, we have placed **practical workshops** that focus specifically on the writing process at university. They are meant as a space to develop your writing skills to be able to compose good scholarly argumentation. Since all of you come from different disciplinary backgrounds, we want to ensure that you have the resources and skills available to respond to the assignments (e.g. citing, writing a study protocol). We are also aware that many of you come from linguistically diverse backgrounds and will be writing in English for the first time. Thus, we want to provide extra time and space to practice and receive help where needed.

Along the same lines, we have included **feedback opportunities** throughout the course to allow you to develop your ideas and discuss them further. You can find them in the overview of the course. Formats will include peer feedback, landscape feedback, as well as individual feedback.

Portfolio Examination – Final Deadline 16.12.2020

The exam consists of a portfolio that contains 3 set assignments. It can be completed individually or in groups of up to 6 students. The final portfolio should be submitted for evaluation to [Digital Exam](#). Details about deadlines and re-examination are available [here](#).

Maximum Length of the portfolio

For 1 student: 12 standard pages.

For 2 students: 18 standard pages.

For 3 students: 24 standard pages.

For 4 students: 30 standard pages.

For 5 students: 36 standard pages.

For 6 students: 42 standard pages

Important note for Group submissions: It must be possible to assess the student individually and therefore it is important that, for portfolios prepared in groups, it is clearly stated which sections the individual students are responsible for and which sections the group is responsible for.

Please note that you can either submit as a group or as an individual! It is not therefore not possible to do, for example, one assignment on your own and two as a group. Your group also should be the same for all three assignments.

Assignment 1 - Draft Submission Deadline 16.10.2020

Choose a reading of your choice from the options provided below. **Describe** and **explain** the key points of your chosen reading. **Choose** a topic from your home discipline and **critically discuss** the key points of your chosen reading in relation to this topic.

If meaningful and space allows, please feel free to include other readings from the syllabus to provide further perspective.

Length of submission: For 1 student: max. 3 Standard pages.

For groups of 2 or more max. 25 % of total standard page count of the portfolio.

Readings:

- **Page 12-13** of Bateson, P., and Martin, P., 2013. Play, Playfulness, Creativity and Innovation, Chapter 2, Cambridge University Press.
- Bonawitz, E., Shafto, P., Gweon, H., Goodman, N.D., Spelke, E. and Schulz, L., 2011. The double-edged sword of pedagogy: Instruction limits spontaneous exploration and discovery. *Cognition*, 120(3), pp.322-330.
- Sternberg, R.J., 2018. A triangular theory of creativity. *Psychology of aesthetics, creativity, and the arts*, 12(1), p.50-67.
- Bjørndahl, J, Fusaroli, R, Østergaard, S & Tylén, K. 2015. Agreeing is not enough: The constructive role of miscommunication. *Interaction Studies*. 16(3): 495-525.

Support available for Assignment 1 during the course:

- ▶ Practical Workshop: Scientific Arguments and how to cite
- ▶ Opportunity to submit first draft and receive feedback

Assignment 2 - Draft Submission Deadline 01.11.2020

Part 1. Provide an in-depth description of one of the following methods:

(1) Experiments, (2) Participant Observation, or (3) Interviews.

Part 2. Develop a study design using the method chosen in *Part 1* to further explore theories on play and creativity. In doing so, submit a study protocol in which you provide:

- ▶ A motivated research question
- ▶ A description of your study design
- ▶ A critical assessment of the advantages and disadvantages of your study design.

Length of submission: For 1 student: max. 5 Standard pages. For groups of 2 or more students: max. 45% of total standard page count of the portfolio.

Support available for Assignment 2 during the course:

- ▶ Practical Workshop: How to write a study protocol
- ▶ Opportunity to submit first draft and receive feedback

Assignment 3 - Draft Submission Deadline 15.11.2020

Choose a particular idea or topic from the course and **consider** how it relates to a topic of your home discipline. Create a product that **discusses** and **reflects** upon the relationship between your chosen topic/idea and your own discipline. In this, **describe** and **explain** the topic of your choice and **critically assess** its relevance.

Possible Formats: Video, Written, Podcast. It is also possible to submit your own format.

Please note that new formats need to be approved by the instructors to coordinate translation of format to standard pages, and to insure achievable work load.

Length of submission: For 1 student: max. 4 Standard pages. For groups of 2 or more students: max. 30% of total standard page count.

1 Standard page is equal to...

- ▶ **Podcast:** 2-3 minutes
- ▶ **Video:** 1-3 minutes

Support available for Assignment 3 during the course:

- ▶ Individual/ Group Feedback and guidance
- ▶ Time to explore and discuss ideas during Week 11

Draft Submission for Assignment 3

Since we do not expect you to have completed your product by the deadline for the draft submission, we would like to ask you to provide the following for the draft submission on the 15.11.2020 to allow us to support you with meaningful feedback and guidance:

- **Project plan** that provides an outline of your final product. This should include a **rough outline of your argumentation** and a reasoning for why you have chosen your given topic.
- **Literature list and other resources** that you plan to have as the theoretical foundation for your product.
- **Discussion of your format choice** in which you provide a clear reasoning for:
 - why you have chosen your given format
 - how your format is meaningful in relation to the topic you have chosen
- **Definition of your target audience** (e.g. students from your home discipline) – In this, provide reasons for why you have chosen your given audience, how you feel your format choice is applicable to your audience, and how you plan to adopt your product to tailor towards your chosen audience.

Some examples to give you an idea on what your product could look like...

Example 1: A podcast about moral psychology and games

Moral Psychology research suggest that we often learn about cultural norms and moral values during play and especially pretend play (McAuliffe, 2016). So, what is the role of games in learning about and testing boundaries of morality? For instance, how can we account for games that allow a behaviour that in other contexts would be considered immoral? In this podcast, we will explore how digital, card and table top games like “Cards against Humanities”, “GTA” and “Secret Hitler” could provide a lens into adult pretend play and morality.

Example 2: An educational video on what we know about playful learning

There is more and more research into the role of playful learning. In this video, we have created an educational summary of current understandings using sketch noting as a dissemination tool. We discuss theories by Burghardt, Bateson & Martin, Anderson & Roepstorff, link them to our own field of education, and show how play theories could support didactical advancements in Higher Education.

Overview of Course

	Week Date	Instructor	Time	Topic of Week
1	W 36 31.08.	Marc Sav Ella	2h	Welcome to the course
			2h	<u>Introducing play</u>
2	W 37 07.09.	Marc	3h	<u>Experimental Methods and Play</u>
3	W 38 14.09.	Marc	3h	<u>Play in Developmental Psychology</u>
4	W 39 21.09.	Marc Amos	3h	<u>Play and Creativity</u>
		Ella	1h	Peer-Feedback activity
5	W 40 28.09.	Ella	2h	How we play together: Play and communication
		Sav	2h	<u>WORKSHOP: How to write a scientific argument</u>
6	W 41 05.10.	Ella	3h	<u>How we play together: Play and collaboration</u> Mid Term Evaluation shared online
	12.10.	No class due to "potato week"		
Deadline 16.10. <u>Deadline: Draft Assignment 1</u>				
7	W 43 19.10.	Marc Sav	1.5h	Mid Term Evaluation Discussion and Landscape Feedback for Assignment 1
		Sav	2.5h	<u>How we play and learn together:</u> The educational perspective
8	W 44 26.10.	Sav Amos	3h	How we play and learn together: The educational perspective
		Marc Ella	1h	WORKSHOP: How to write a study protocol

Deadline	01.11.	<u>Deadline: Draft Assignment 2</u>		
9	W 45 02.11.	Amos	4h	How we play and learn together: Designing for play
10	W 46 09.11.	Sav	3h	<u>Play across cultures</u>
		Marc Sav	1h	Working on Assignment 3 & Feedback on Assignment 2
Deadline	15.11.	<u>Submission of First Idea draft for Assignment 3</u>		
11	W 47 16.11.	Sav Marc	4h	Working on assignment 3 & Feedback on draft assignments
12	W 48 23.11.	Felix & Niels	3h	<u>Play across the ages: Cultural Transmission</u>
13	W 49 30.11.	Marc Sav	2h	Course summary and final exam prep
			1h	Final course evaluation and discussion
			2h+	Support available
Deadline	16.12	<u>FINAL PORTFOLIO SUBMISSION ON DIGITAL EXAM</u>		

Week 1 – Introducing Play

4 hours | Sav, Ella, Marc | 31.08.2020

In the first week of this course, we will begin by providing you with an outline of the lesson plan, the general course goals and spend some time getting to know each other. For the second part of this class, we'll then shift our discussion to the content of the course. Marc will provide you with an introduction to the topic of play and some of the complexities that come about when attempting to define the terminology around it.

The readings you are asked to prepare focus on how to define, characterize and categorize play and why it can sometimes be very challenging to do so. Being able to characterize play as a form of behavior across species will provide us we fundamental building blocks needed for the rest of the course.

Readings

- Bateson, P., and Martin, P., 2013. Play, Playfulness, Creativity and Innovation, pp. 10-41, Cambridge University Press.
- Burghardt, G.M., 2006. The genesis of animal play: Testing the limits, pp. 68-111. Mit Press.

Optional Further Resources

- **Youtube Video:** Professor Gordon Burghardt - The Origins and Diversity of Play - <https://www.youtube.com/watch?v=mN0lme71QZI>

Week 2 – Experimental Methods and Play

3 hours | Marc | 07.09.2020

This week we'll do a crash course in experimental methods, going over concepts such as experimental design, variables, samples, analysis. We'll also learn how to read and understand academic articles that report on experimental findings and we will practice the design of experiments ourselves. Specifically, we will be looking at studies investigating play with an experimental approach and think about how we might study play in experimental lab or field settings.

Readings

- Coolican, H., 2009. Research methods and statistics in psychology 5th ed., pp. 28-80, Hodder Education.
- Bonawitz, E., Shafto, P., Gweon, H., Goodman, N.D., Spelke, E. and Schulz, L., 2011. The double-edged sword of pedagogy: Instruction limits spontaneous exploration and discovery. *Cognition*, 120(3), pp.322-330.
- Schulz, L.E. and Bonawitz, E.B., 2007. Serious fun: preschoolers engage in more exploratory play when evidence is confounded. *Developmental psychology*, 43(4), p.1045-1050

Optional Further Resources

- **Youtube Video:** Laura Schulz - Cognitive Pragmatism: Children's Inferences about Learning, Trying, and Caring - <https://www.youtube.com/watch?v=icwW5cgAmHA>
- **Youtube Video:** Play in childhood supports the same skills that underlie scientific reasoning - <https://www.youtube.com/watch?v=k8VsSqMYtqc>

Week 3 – Play in Developmental Psychology

3 hours | Marc

Play is one of the main ways in which children learn and develop. This week, we will be looking at how different types of play emerge during childhood and review some of the research conducted on certain forms of play in developmental psychology. We will also be discussing a cognitive theory of play.

Readings

- Lillard, A.S., 2015. The development of play. Handbook of child psychology and developmental science, pp.1-44.
- Andersen, M. M. 2020, Excerpt from Play, Aarhus University Press.
- Chu & Schulz, 2020. Exploratory Play, Rational Action and Efficient Search, pre-print.

Week 4 - Play and Creativity

4 hours | Marc | **Note:** 2 hours WORKSHOP: How to write a scientific argument

A growing body of research has found a relation between play and creativity. This week, we will be looking at creativity theories and discuss how play and creativity might be related and how they might be different.

Readings

- Sternberg, R.J., 2018. A triangular theory of creativity. *Psychology of aesthetics, creativity, and the arts*, 12(1), p.50-67.
- Ward, T.B., 2007. Creative cognition as a window on creativity. *Methods*, 42(1), pp.28-37.
- *Chapter 5: Creativity in humans*
Bateson, P., and Martin, P., 2013. *Play, Playfulness, Creativity and Innovation*, pp. 55-68, Cambridge University Press.
- *Chapter 8: Childhood play and creativity*
Bateson, P., and Martin, P., 2013. *Play, Playfulness, Creativity and Innovation*, pp. 89-103, Cambridge University Press.
- Andersen, M. M. 2020, *Creativity* excerpt from *Play*, Aarhus University Press.

Week 5 – How we play together: Play and communication

3 hours | Ella

In weeks 5 and 6 of the course, we zoom out from the individual psychological perspective to take a closer look at interaction in play. This week, we take a conversation analytical approach to get a better understanding of the way we communicate when we play. We use an empirical case from my research to take a closer look at the co-construction of play through communication. We discuss how a detailed understanding of communication in play is useful when it is applied in designing playful learning environments.

This week also introduces a classic qualitative research method: participant observation. After reflecting on the strengths and weaknesses of the method, we return to the empirical case from earlier in the day and discuss potential implications of an observation-based research design.

Readings

- [Watch TEDxBermuda Elizabeth Stokoe “The science of analyzing conversations, second by second.”](#)
- Stivers, T, Sidnell, J & Bergen, C. 2018. Children’s responses to questions in peer interaction: A window into the ontogenesis of interactional competence. *Journal of Pragmatics*. 124: 14-30.
- Bernard, H. Russel. 2006. Chapter 13: "Participant observation" in *Research methods in anthropology*, fourth edition, pp. 342-386.

Preparation for Class

In your reading of Stivers, Sidnell & Bergen, please focus on section 3.2.1.

As you read, ask yourself: What do you notice about the children's interaction when they play?

Thinking about participant observation (Bernard 2006), what would you look for if you were given the opportunity to be participant observer during the sessions in Stivers et al.'s study? Why?

Optional Further Resources

- Bovaird, Tony. 2007. “Beyond engagement and participation.” *Public Administration Review* 67(5): 846-860.

Week 6 – How we play together: Play in collaboration

3 hours | Ella

Drawing on our discussions of communication in play from last week, we turn our attention to collaboration in play. We take a closer look at play as an opportunity to enter into shared creative processes. Again, we use an empirical case from my research on collaboration between children and adults to analyze the interaction dynamics that emerge. We discuss how this aspect of play could be applied to organize co-creative processes.

This week also introduces interviews as a research method. We take a look at the different types of interviews, and we discuss the strengths and weaknesses of different interview techniques and of interviews more broadly. We then return to the empirical case from earlier in the day and discuss potential implications of interview-based research design.

Readings

- [Watch TEDxAarhus talk by Elisabeth McClure “Are children really more creative than adults?”](#)
- Bernard, H. Russel. 2006. Chapter 9: “Interviewing; Unstructured and Semistructured.” in Research methods in anthropology, fourth edition, pp. 210-250.
- Bjørndahl, J, Fusaroli, R, Østergaard, S & Tylén, K. 2015. Agreeing is not enough: The constructive role of miscommunication. Interaction Studies. 16(3): 495-525.

Preparation for Class

As you watch the TEDx talk and read Bjørndahl et al., consider the following questions:

- Would you consider the activity in Bjørndahl et al.'s study as play? Why/why not?
- Which of the three interaction styles identified by Bjørndahl et al. is more playful? Why?
- Think back to last week. Do you notice anything in the interaction described by Bjørndahl et al. that reminds you of the interaction of the playing children?

Optional Further Resources

- Kvale, Steinar & Svend Brinkmann. 2014. Chapter 1: “Introduction to Interview Research” in InterViews: Learning the Craft of Qualitative Research Interviewing.

Week 7 – How we play and learn together: The educational perspective

4 hours | Sav (Marc) | 19.10.2020 |

Note: First 1.5 hours Mid Term Evaluation Discussion & Landscape Feedback for Assignment 1

Week 7 will be an introductory session to how play-based learning and creative learning have been conceptualised in formal learning environments. We will discuss how the course content so far relates to and affects education and we will gain an overview of educational approaches that have incorporated play in some way (e.g. Reggio Children, Opal School, Pedagogy of Play). In this, we will focus on the ways in which play has been operationalised and understood in the different educational contexts.

The readings will provide a first introduction into the complexities of integrating play into school. Mardell et al (2016) (i.e. Pedagogy of Play) will hereby serve as a case study for how play has been conceptualized in a holistic pedagogy.

Readings

- Revisit Bonawitz et al (2011) and Schulz et al (2007) from Week 2
- David Kushner (2012) Play is natural to childhood but school is not: The problem of integrating play into the curriculum, *International Journal of Play*, 1:3, 242-249, <https://doi.org/10.1080/21594937.2012.735803>
- *Chapter 7 from Papert, S. (1993). The children's machine: Rethinking school in the age of the computer.* BasicBooks, 10 East 53rd St., New York, NY 10022-5299.
- Mardell, B., Wilson, D., Ryan, J., Ertel, K., Krechevsky, M., & Baker, M. (2016). *Towards a pedagogy of play.* Cambridge, MA: Harvard Graduate School of Education.

Preparation for Class

In order to prepare for class, please revisit your notes on Bonawitz et al (2011) and Schulz et al (2007) from week 37 and read the literature assigned for this week. Additionally, please produce a postcard (addressed to your fellow classmates) in which you describe a playful experience that you had in your childhood that involved an adult in some way. Of course, you can include an image, photo or illustration representing some relevant aspect of your playful moment. We will share these postcards in the beginning of the class to nurture our discussion.

Further Resources

- Opal School Framework - <https://opalschool.org/inspiring-inventiveness/>
- About Anji Play - <http://www.anjiplay.com/guide>
- Pedagogy of Play - <http://pz.harvard.edu/projects/pedagogy-of-play#xlink>

Week 8 – How we play and learn together: the educational perspective

4 hours | Sav, Amos | 26.10.2020 |

Note: 1 hours WORKSHOP: How to write a study protocol

During this week, we will consider learning through play in both informal and formal learning environments, and discuss the complexities that both settings inherently hold. We will address intervention-based and translational research, and spend some time exploring how games have entered the modern-day classroom and what the construct gamification has to do with play. In this, we will explore behaviourism and constructivism to ground our understanding in a broader context.

Readings

- Ramirez, D., & Squire, K. (2015). Gamification and learning. *The gameful world: Approaches, issues, applications*, 629-652.
- Resnick, M., & Siegel, D. (2015). A different approach to coding. *Bright/Medium*.
- Chapter 1 of Resnick, M., & Robinson, K. (2017). *Lifelong kindergarten: Cultivating creativity through projects, passion, peers, and play*. MIT press.

Preparation for Class

To be announced on Blackboard

Optional Further Resources

- Shute, V. J., Wang, L., Greiff, S., Zhao, W., & Moore, G. (2016). Measuring problem solving skills via stealth assessment in an engaging video game. *Computers in Human Behavior*, 63, 106-117.
- Bogost, I. (2015). Why gamification is bullshit. *The gameful world: Approaches, issues, applications*, 65.
- Sailer, M., & Homner, L. (2020). The gamification of learning: A meta-analysis.

Week 9 – How we play and learn together: Designing for play

4 hours | Amos | 02.11.2020

This week we'll explore the design of creative learning experiences that invite children to engage in "serious play." We'll begin by playing together through a tinkering activity, and follow up by reflecting on our experience as well as the principles of its design and facilitation. Then we'll discuss the qualities of play materials, environments, and facilitation strategies that enable learners of all ages to have and explore wonderful ideas together.

For Instructionism vs. Constructionism:

In this brief chapter, Seymour Papert contrasts his approach to creating learning tools and experiences from that which is most often encountered in schools. He proposes we think of the child as a "bricoleur" whose creativity and intelligence is manifested when they combine different ideas and objects to create something meaningful.

For Duckworth

If the act of learning cannot be reduced to the transfer of knowledge and is more meaningfully described as "the having of wonderful ideas," how then should we think about education? This explores the implications of viewing the learner as a subject, with their own volition, interests, and pre-existing knowledge, instead of as an object.

Petrich et. al:

This piece describes a set of activities, practices, designs and spaces that grew out of the intellectual foundations created by Papert and Duckworth, and addresses the strange but common idea in our society that for learning to be rigorous and meaningful, it must be abstract, devoid of subjective meaning, and above all unpleasant.

Readings

- Duckworth, E. (1972). The Having of Wonderful Ideas. *Harvard Educational Review*, 42(2), 217–231. <https://doi.org/10.17763/haer.42.2.g71724846u525up3>
- Petrich, M., Wilkinson K., & Bevan, B. (2013). It looks like fun, but are they learning? In M. Honey & D. Kanter (Eds.), *Design, make, play: Growing the next generation of STEM innovators*(pp. 50–70). New York: Routledge.
- Papert, S. (1993). The children's machine. *TECHNOLOGY REVIEW-MANCHESTER NH*, 96, 28-28.

Optional Further Resources

- Video: "Designing for Tinkerability" (7 minutes) <https://vimeo.com/198750387>

Week 10 – Play across cultures

4 hours | Sav | 09.11.2020 | Note: 1 hour Working on Assignment 3

During this week, we will zoom out a bit more from the educational perspective and consider play across cultures. We will hereby engage in a debate around the paradox that play is considered both a universal behaviour and a cultural construct. We will travel across the world to discuss case examples of play in different cultural and demographic environments. In this, we will also have a chance to discuss the role of white-centred ideology in the educational play discourse, and what affect this may have on how we understand play (e.g. educational colonising) and have written and talked about it in the present and past.

The first reading of this week will introduce you to play in the hunter-gatherer community of the Hadza in Northern Tanzania. The second will provide some perspectives from two Hong-Kong based researchers Cheng and Wu about how the concept of learning through play differs across cultural norms.

Readings

- Crittenden, A. N. (2016). Children's foraging and play among the Hadza. *Origins and implications of the evolution of childhood*, 155-172.
- CHENG, P. W. D., & WU, S. C. (2013). Serious learners or serious players? Revisiting the concept of learning through play in Hong Kong and German classrooms. In *Varied perspectives on play and learning: Theory and research on early years education* (pp. 193-212). Information Age Pub.

Optional Further Resources

- Gray, P. (2014). The play theory of hunter-gatherer egalitarianism. *Ancestral landscapes in human evolution: Culture, childrearing and social wellbeing*, 190-213.
- Lew-Levy, S., Boyette, A. H., Crittenden, A. N., Hewlett, B. S., & Lamb, M. E. (2019). Gender-Typed and Gender-Segregated Play Among Tanzanian Hadza and Congolese BaYaka Hunter-Gatherer Children and Adolescents. *Child development*.
- Gosso, Y., Otta, E., Ribeiro, F. J. L., & Bussab, V. S. R. (2005). Play in Hunter-Gatherer Society.
- Pellegrini, A. D., & Smith, P. K. (Eds.). (2005). *The nature of play: Great apes and humans*. Guilford Press.
- Lew-Levy, S., Boyette, A. H., Crittenden, A. N., Hewlett, B. S., & Lamb, M. E. (2019). Gender-Typed and Gender-Segregated Play Among Tanzanian Hadza and Congolese BaYaka Hunter-Gatherer Children and Adolescents. *Child development*.

Week 12 – Play across the ages: Cultural Transmission

3 hours | Felix, Niels | 23.11.2020

Readings

- Lew-Levy, S., Milks, A., Lavi, N., Pope, S.M., Friesem, D.E., 2020. Where innovations flourish: an ethnographic and archaeological overview of hunter–gatherer learning contexts. *Evolutionary Human Sciences* 2, e31. <https://doi.org/10.1017/ehs.2020.35>
- Csibra, G., Gergely, G., 2009. Natural pedagogy. *Trends in Cognitive Sciences* 13, 148–153. <https://doi.org/10.1016/j.tics.2009.01.005>
- Riede, F., Johannsen, N.N., Högberg, A., Nowell, A., Lombard, M., 2018. The role of play objects and object play in human cognitive evolution and innovation. *Evolutionary Anthropology: Issues, News, and Reviews* 27, 46–59. <https://doi.org/10.1002/evan.21555>

Optional Further Resources

- Neldner, K., Redshaw, J., Murphy, S., Tomaselli, K., Davis, J., Dixon, B., Nielsen, M., 2019. Creation across culture: Children’s tool innovation is influenced by cultural and developmental factors. *Developmental Psychology* 55, 877–889. <https://doi.org/10.1037/dev0000672>
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