

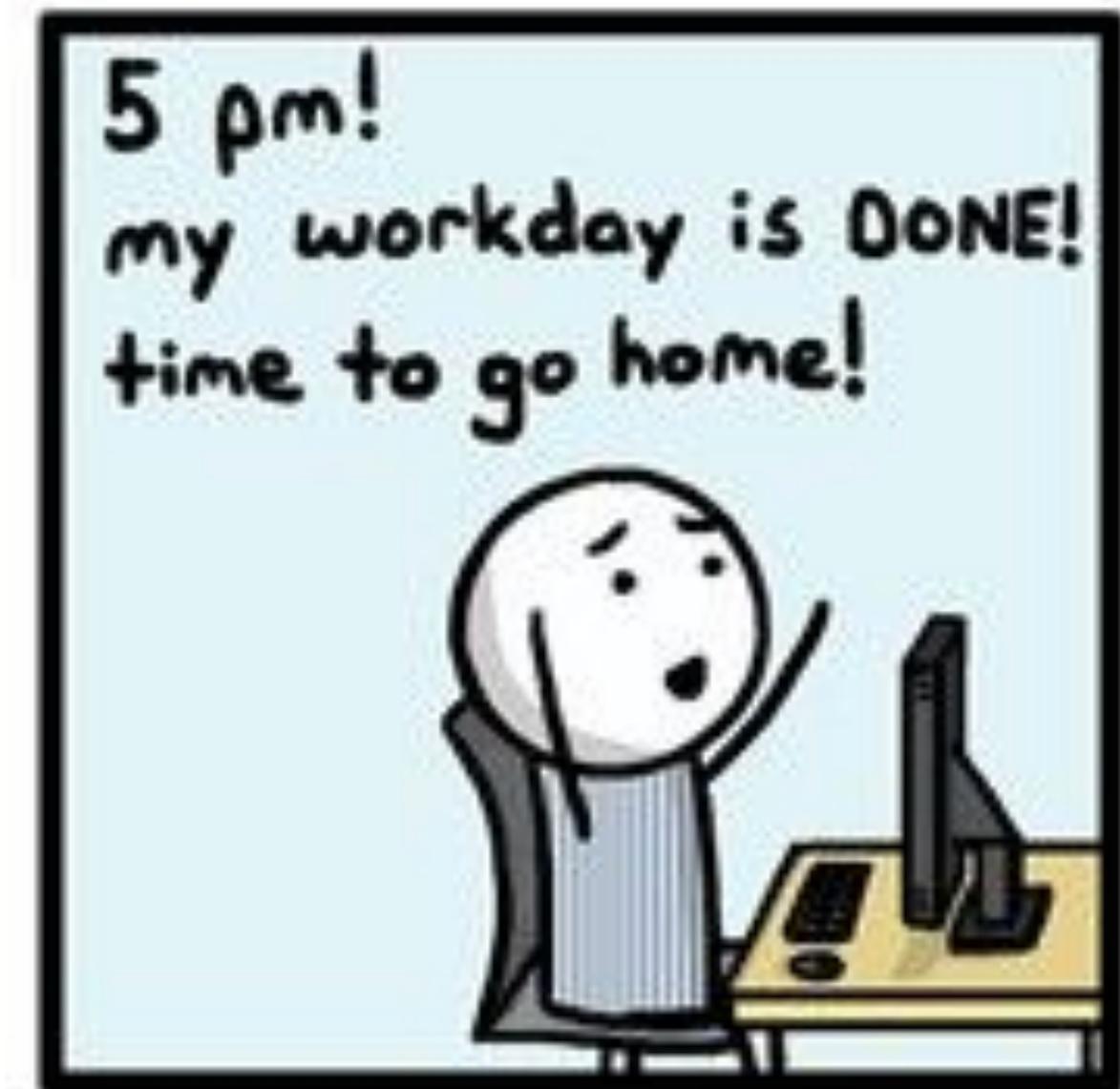
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DISTRACTION OR LIFE SAVER?

The Role of Technology in Undergraduate Students' Boundary Management Strategies

Hajin Lim, Ian Arawjo, Yaxian Xie, Negar Khojasteh, Susan R. Fussell

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Source: <https://www.actioned.com/best-work-from-home-memes/>



Boundary Management Strategy

- Principles to organize and separate multiple role demands and expectations
- One of the important factors in one's senses of life balance and satisfaction

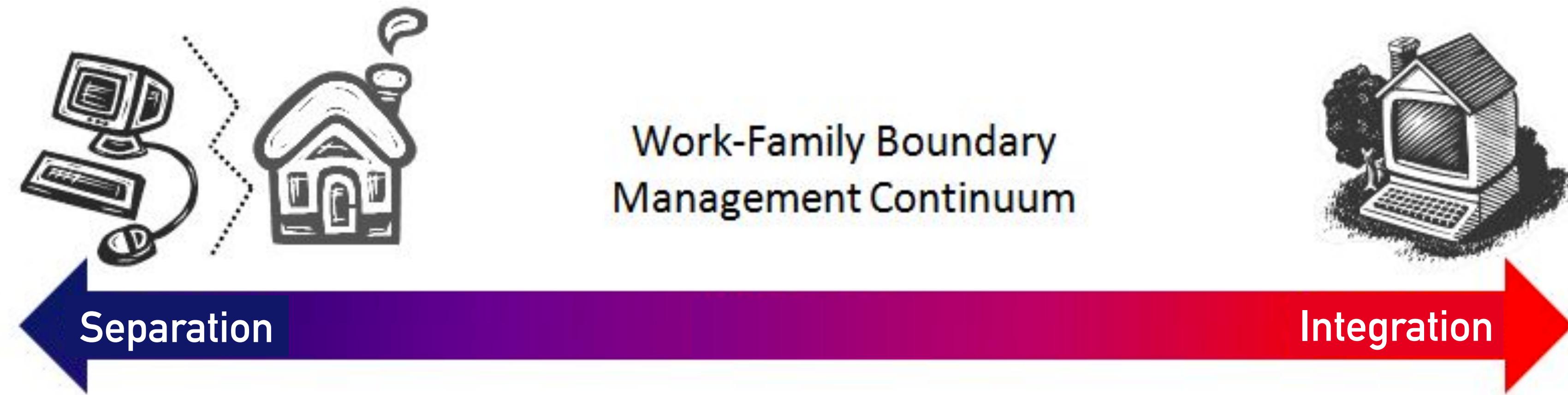


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Boundary Management Strategy



Nipper-Eng (1994)

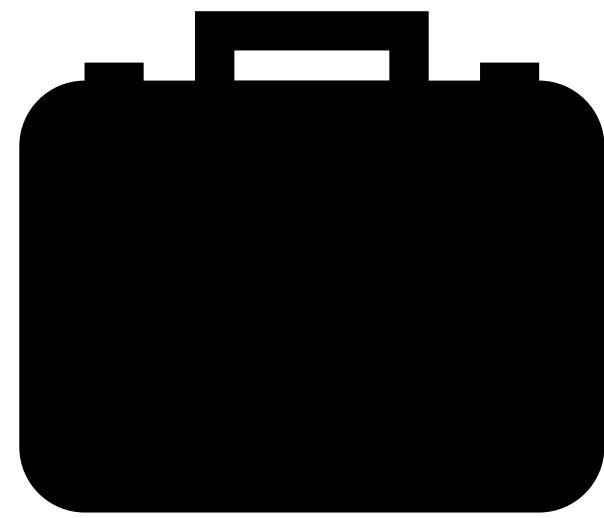


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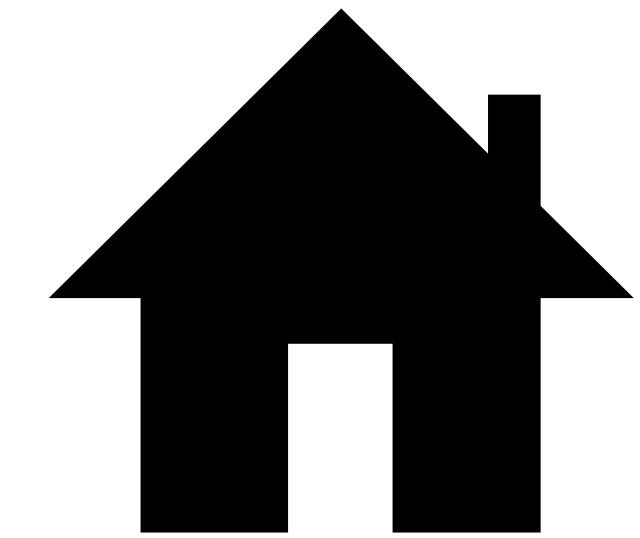
<https://www.sesp.northwestern.edu/masters-learning-and-organizational-change/knowledge-lens/stories/2012/managing-boundaries-between-work-and-family-comparison-of-satisfaction-levels-between-part-time-and-full-time-working-mothers.html>

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Work-Home Dichotomy



Work



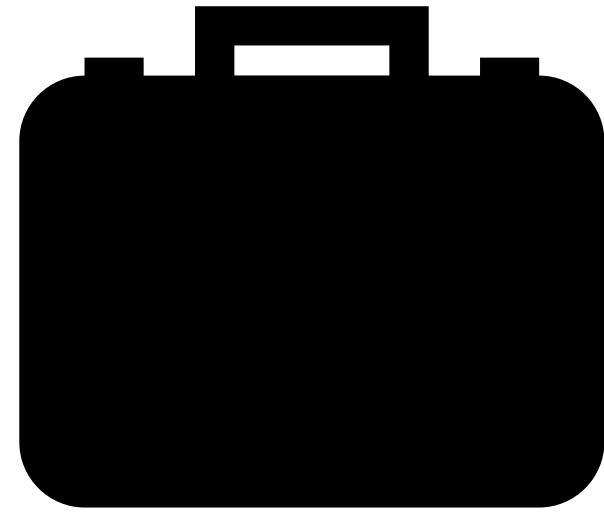
Home/Family



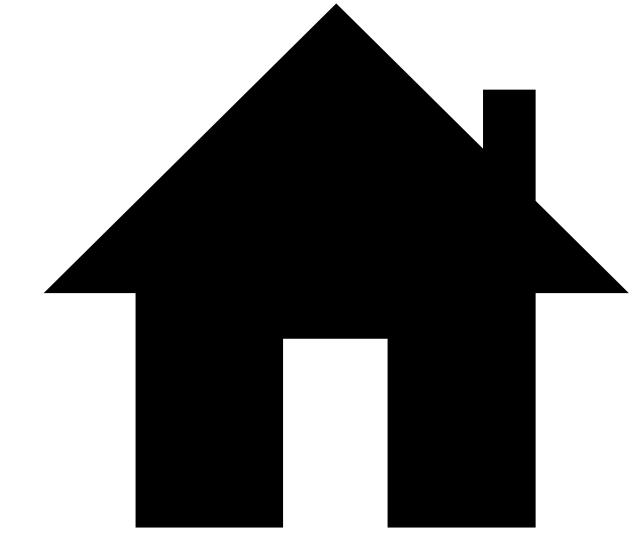
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Work-Home Dichotomy

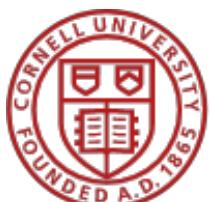


Work



Home/Family

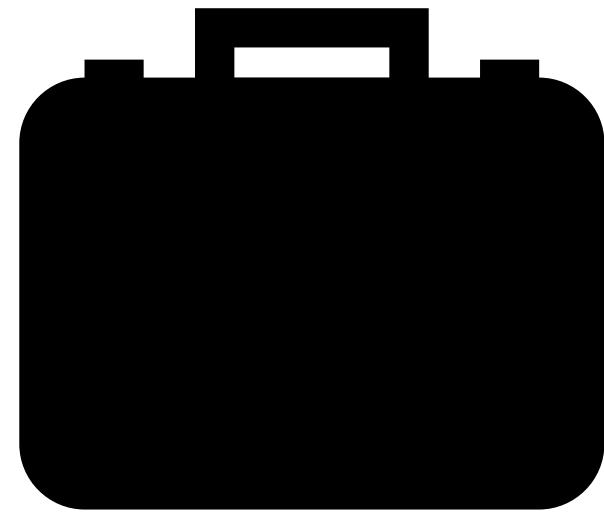
- Focused on working professionals who have families
- Examples: **IT Workers** (Messersmith, 2007), **University professionals** (Salazar, 2001), **Working parents** (Grimes and Brush, 2008)



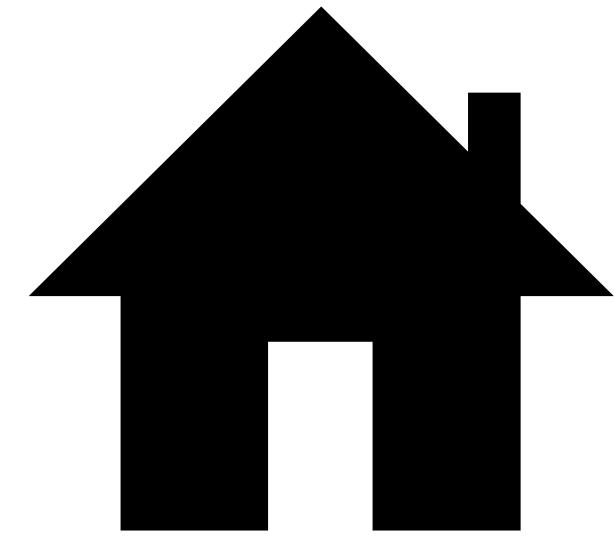
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Image Source: <https://www.sesp.northwestern.edu/masters-learning-and-organizational-change/knowledge-lens/stories/2012/managing-boundaries-between-work-and-family-comparison-of-satisfaction-levels-between-part-time-and-full-time-working-mothers.html>

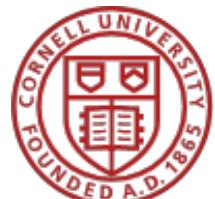
Can you fit the Undergraduate Student's Life into Work and Home dichotomy?



Work



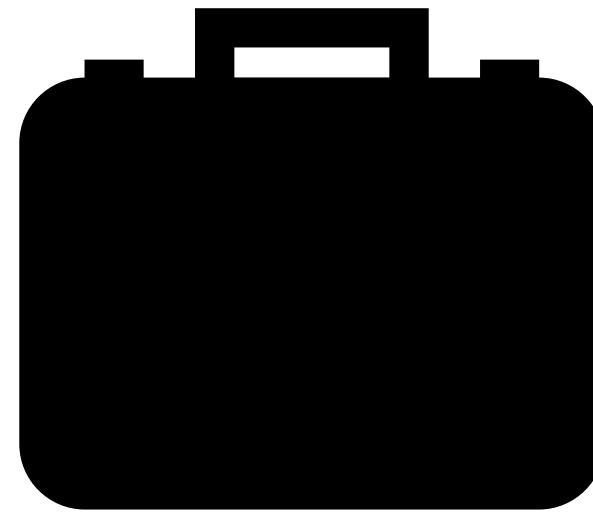
Home/Family



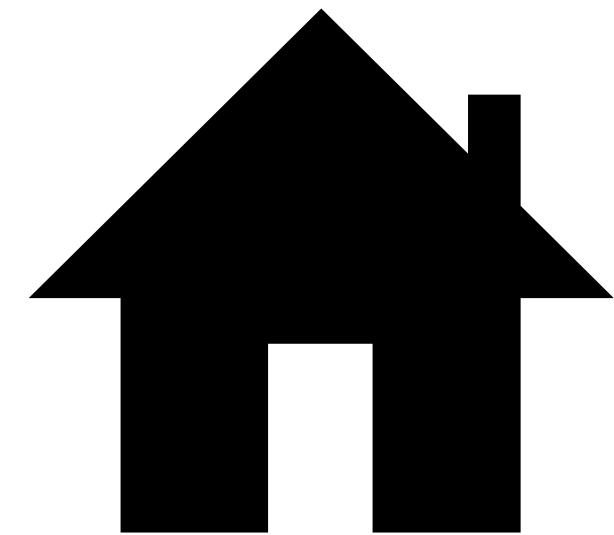
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Boundaries in a State of Flux

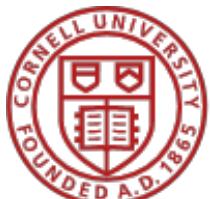


Work



Home/Family

- Less clear definition what constitutes work and home lives
- Life boundaries are transient or not yet settled



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Our Focus: Undergraduate Student Population in the U.S.

Research Goal

- Understanding how undergraduate students create, maintain and manage their life spheres in connection with technology

Expected Contribution

- Understanding of the practices differed from the previous findings applied to working professionals
- Inform the technology designs for the generation of digital natives



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Image Source: <http://laoblogger.com/college-student-life-clipart.html>

RESEARCH QUESTIONS

- 1.What are the characteristics of life boundaries of undergraduate students?
- 2.What strategies do undergraduate students use to manage life boundaries?



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RESEARCH QUESTIONS

- 1.What are the characteristics of life boundaries of undergraduate students?
- 2.What strategies do undergraduate students use to manage life boundaries?
- 3.How does technology influence undergraduates' perceptions of their life balance?



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STUDY PARTICIPANTS

- Semi-structured interviews with 29 undergrad from diverse majors
- Avg. 21.4 years old (9 males)
- Study Setting: a Large U.S. Research University in the college town
(Undergrad population: 15,000 +)



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Image Source: <https://www.cornell.edu/about/mission.cfm>

INTERVIEW PROCEDURE

1. Identifying Life Domains

- How many classes are you taking?
- Explain your typical weekday/weekend

2. Investigating Life Domains

(For each life spheres)

- What kinds of activities and people are involved?
- What kinds of technologies are involved?

3. Boundary Management Practices

- How do you manage the boundaries between X and Y?
- Recall any recent conflicts between life spheres

4. Perceptions about Life Balance and Technology

- How balanced is your life now?
- How does the technology influence your life balance?



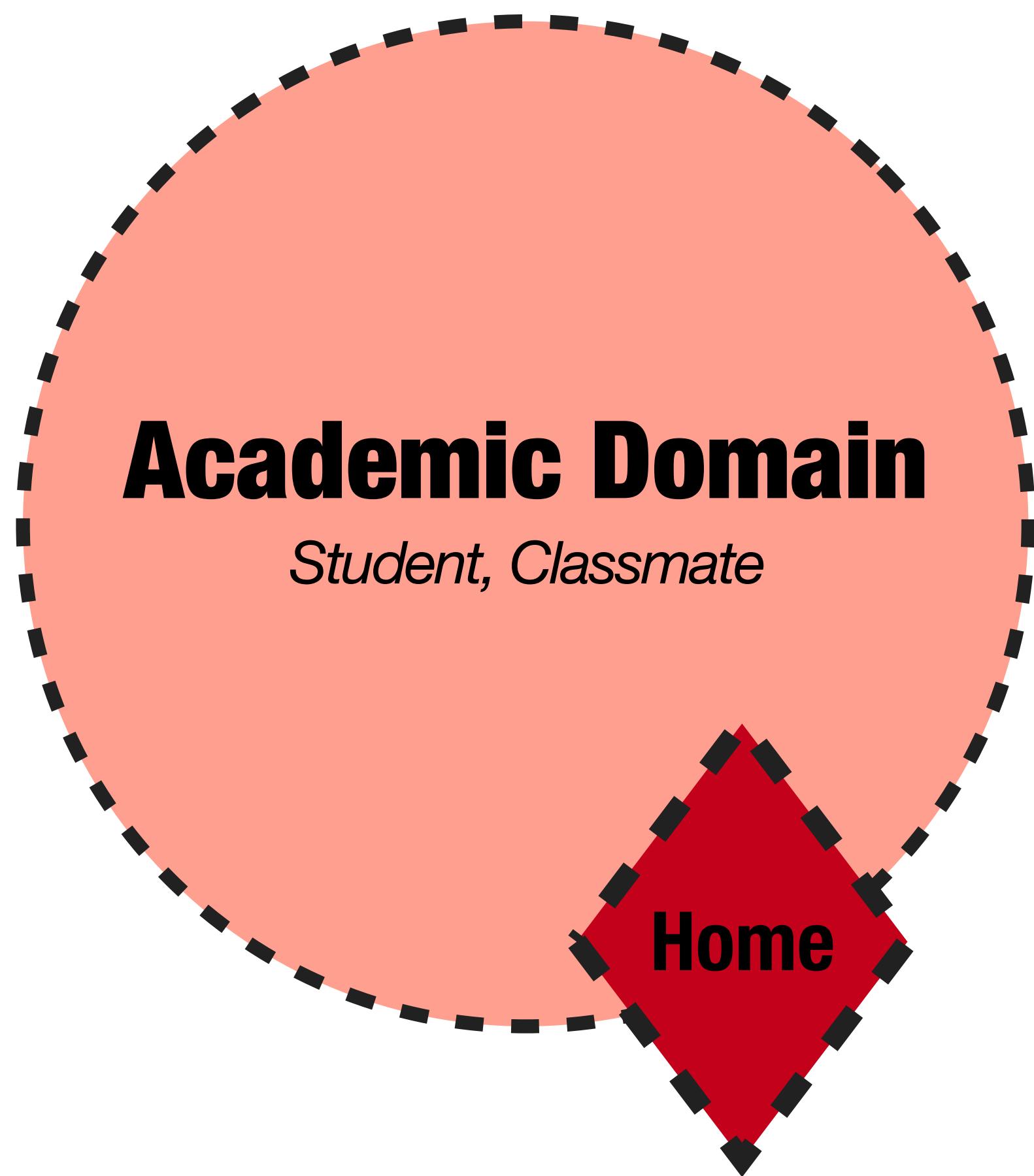
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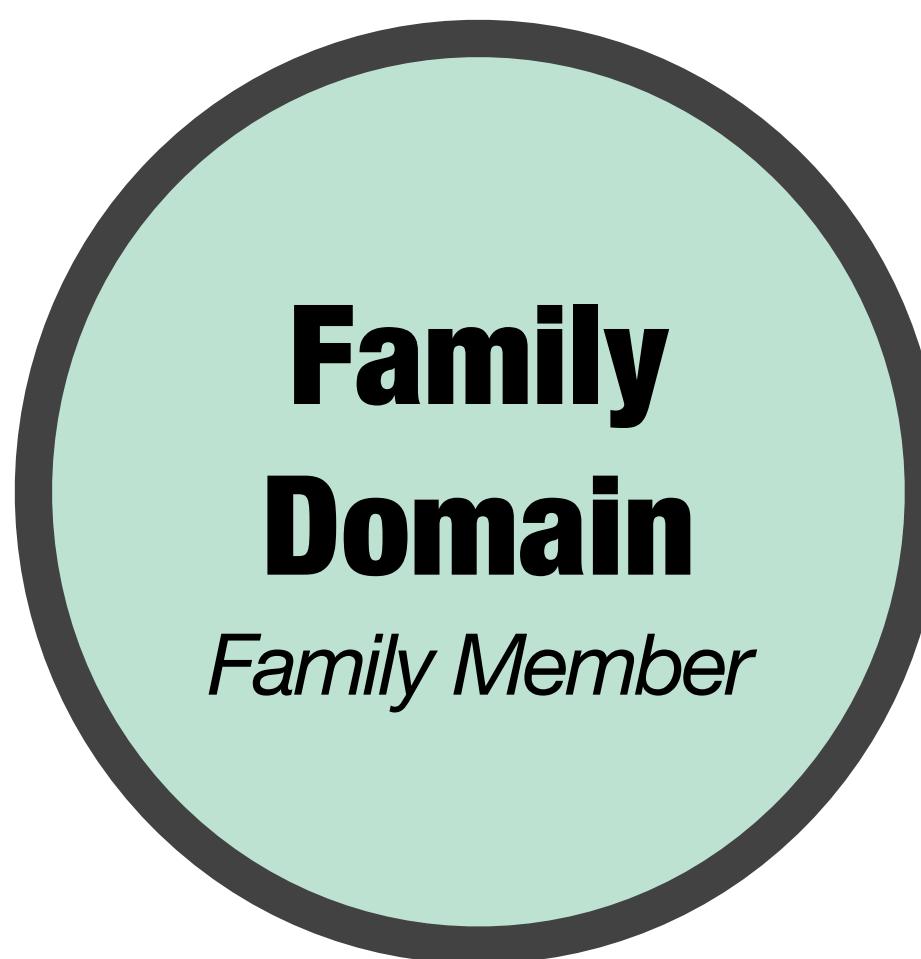
CONCEPTUALIZATION OF LIFE DOMAINS



School

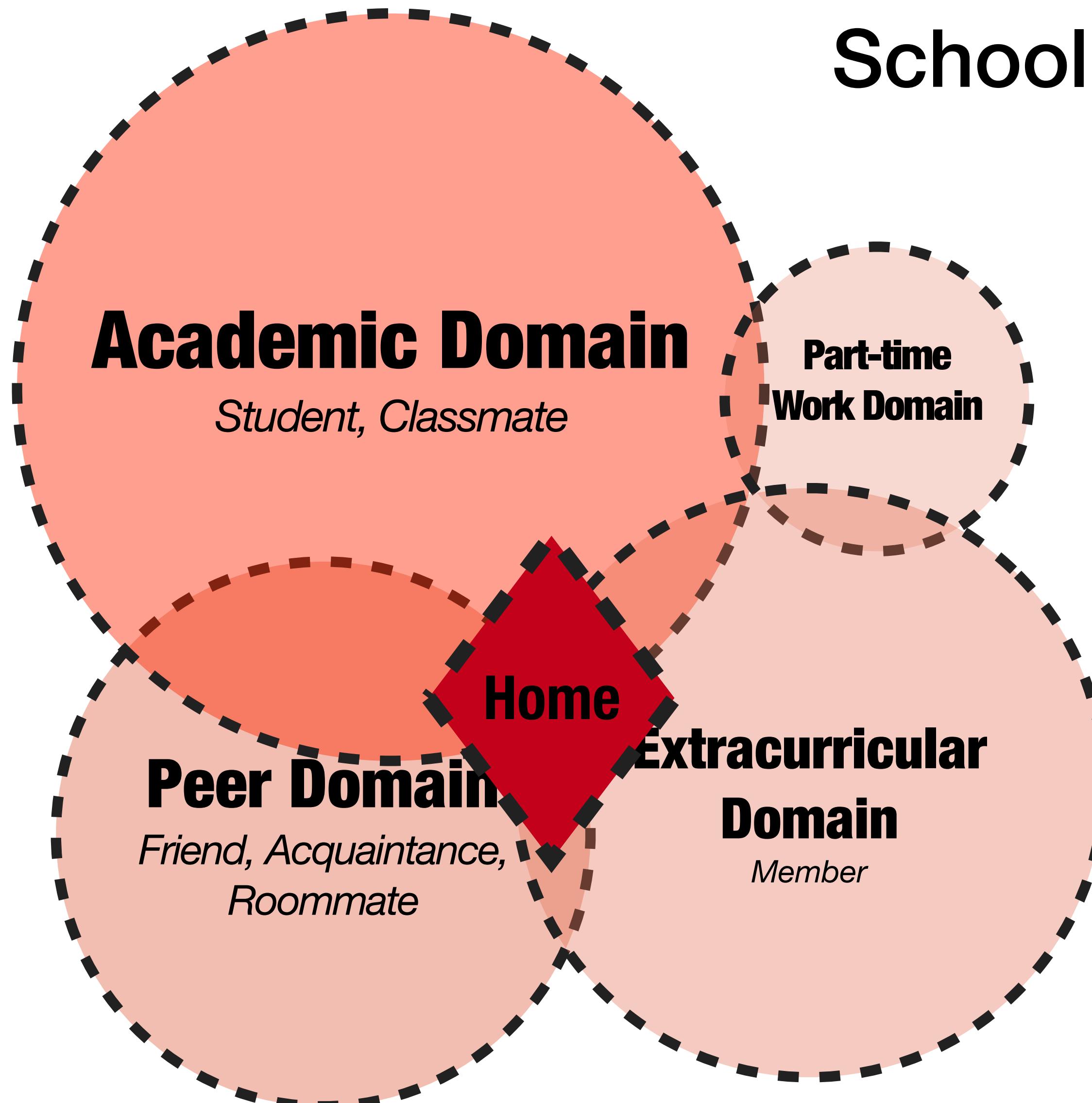
Spatially,
Temporally
Separated

Non-School



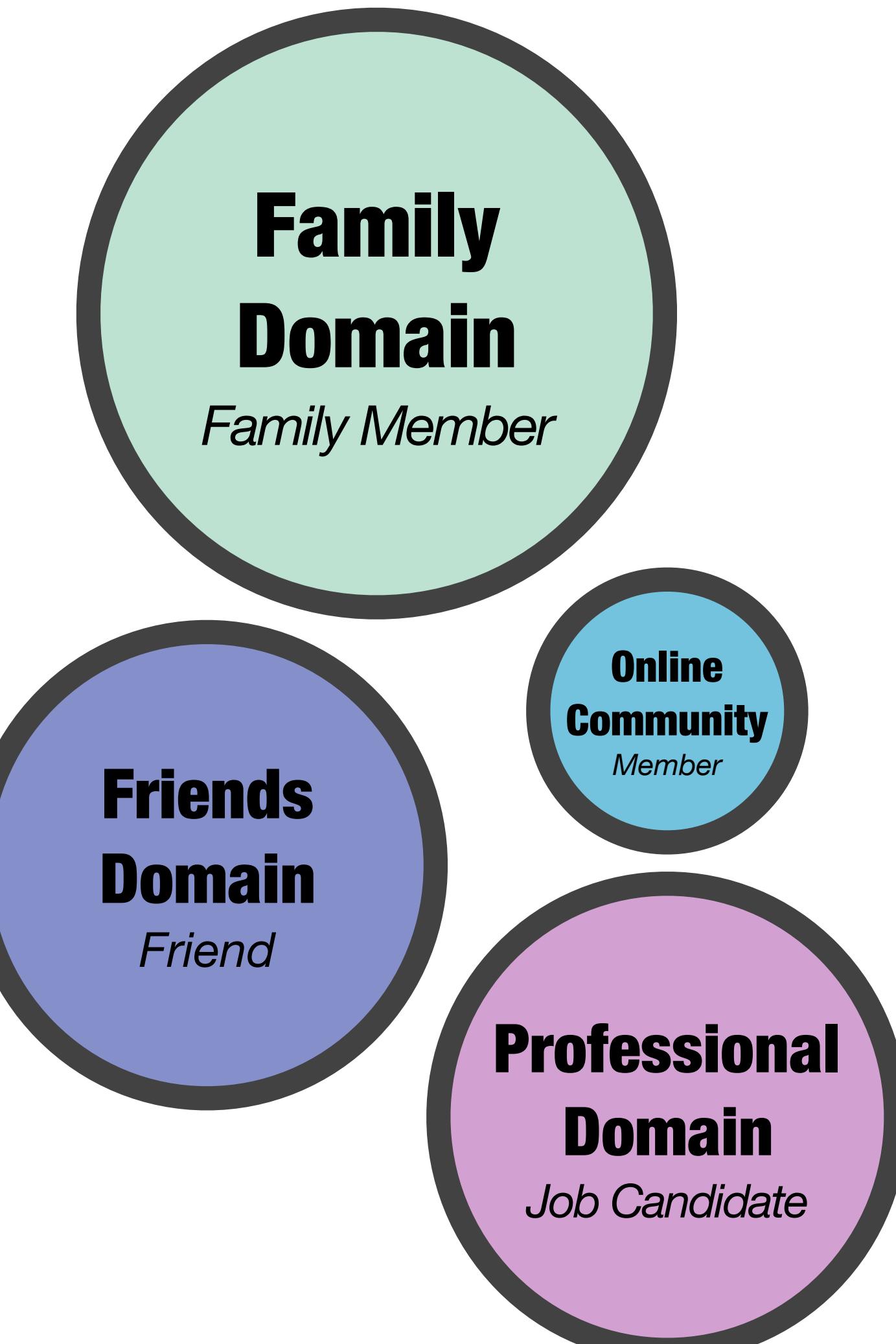
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CONCEPTUALIZATION OF LIFE DOMAINS



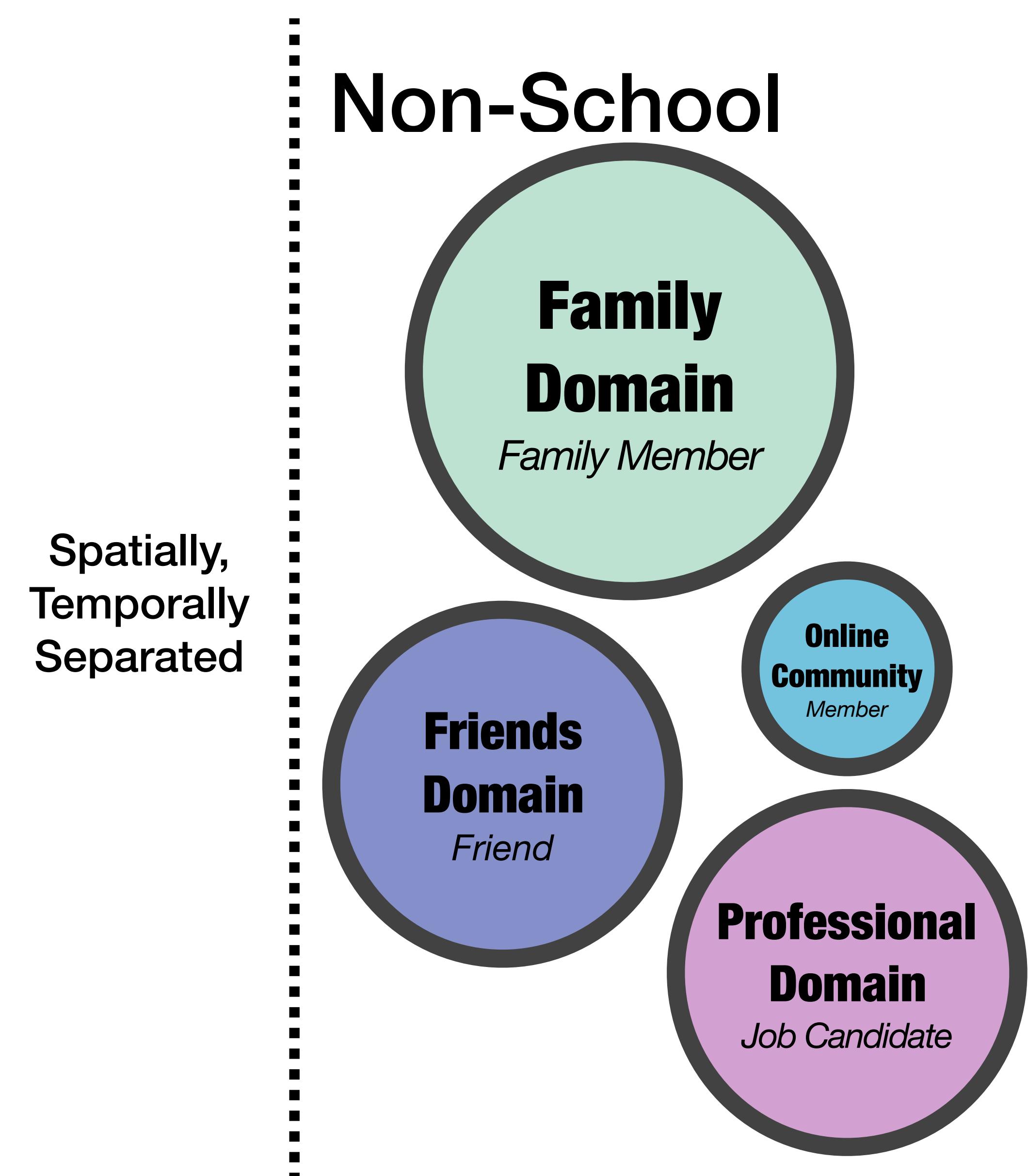
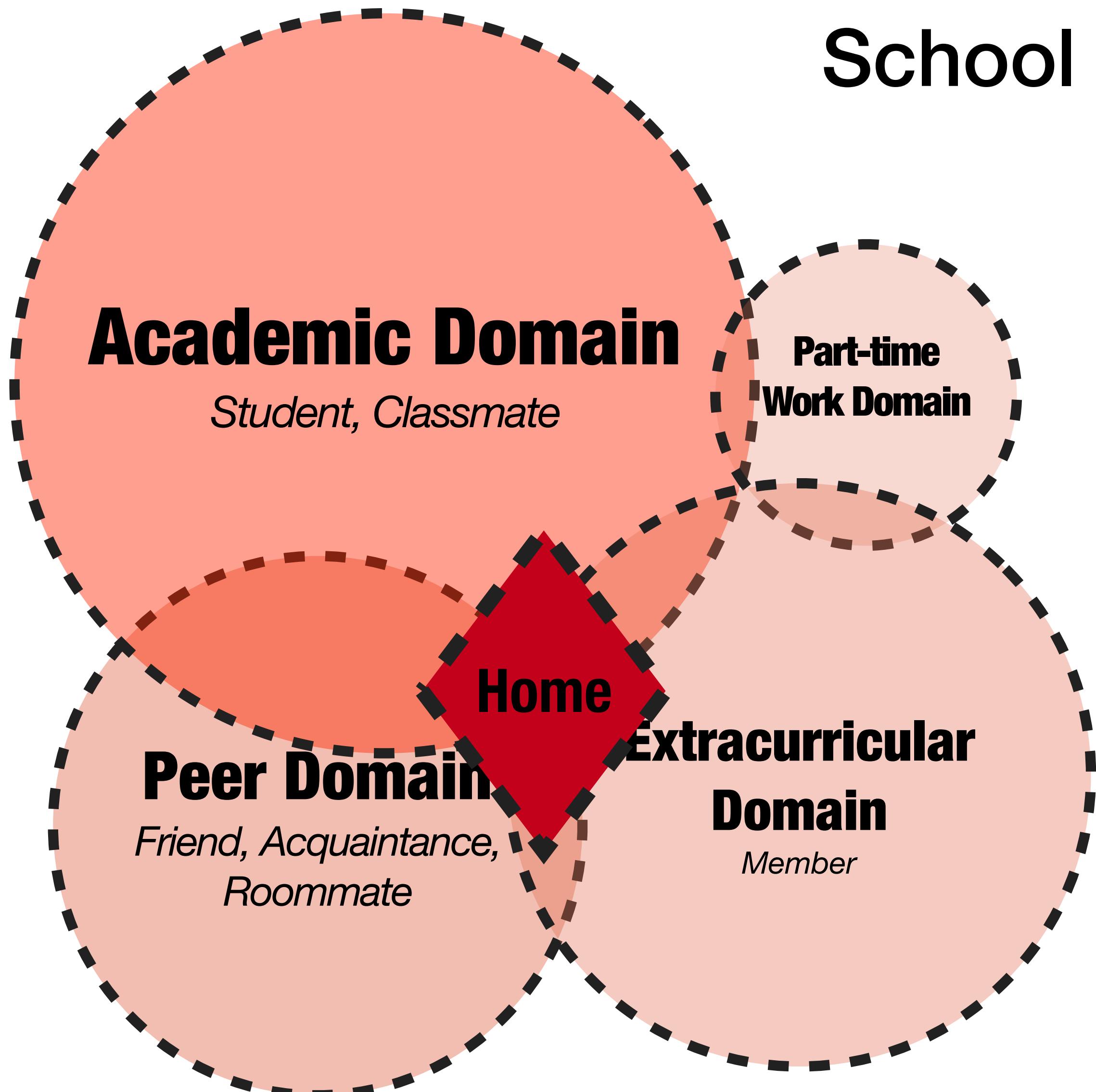
Spatially,
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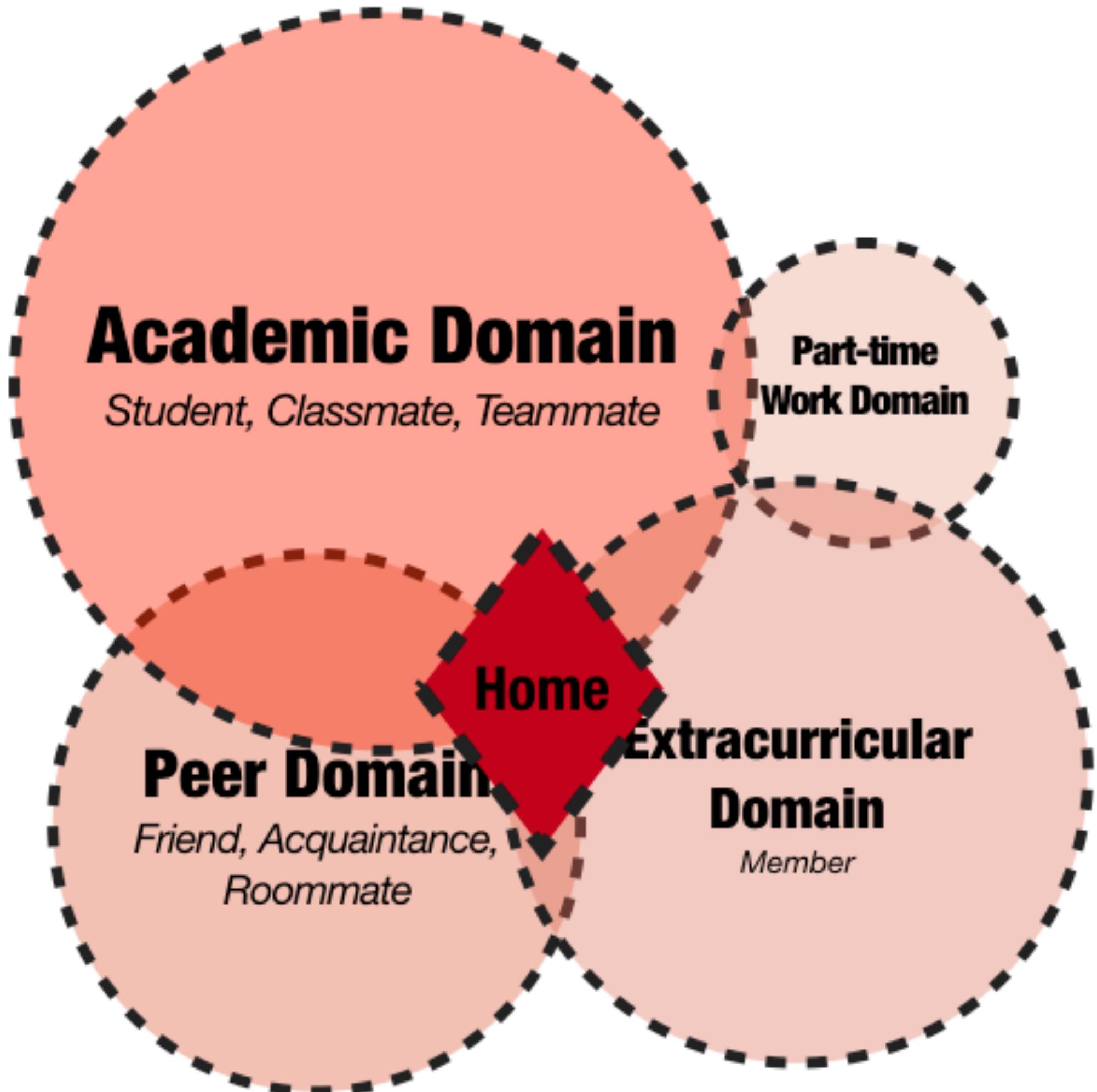
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CONCEPTUALIZATION OF LIFE DOMAINS

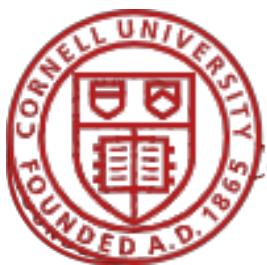


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Highly Flexible and Permeable Boundaries



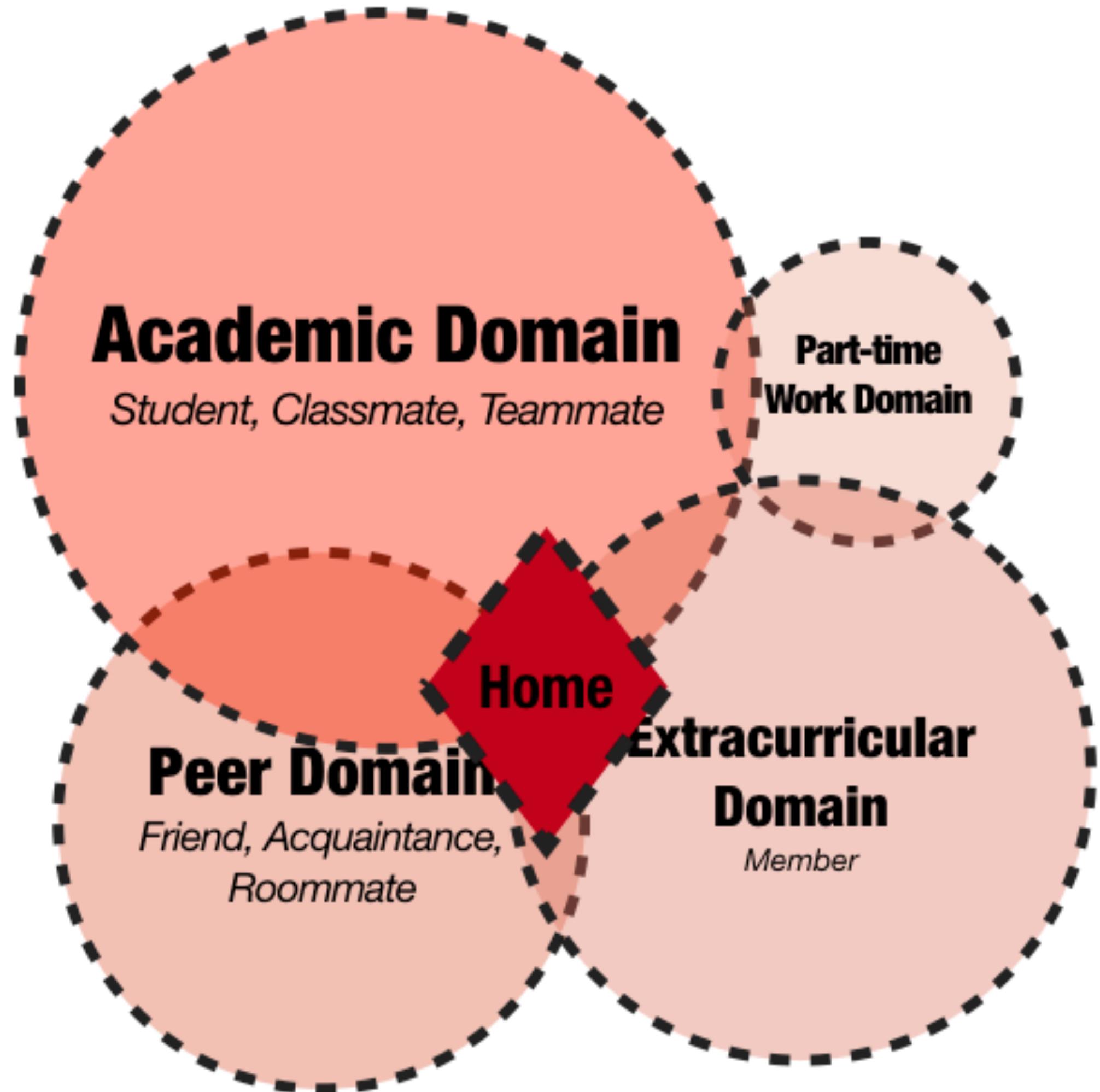
- Many life spheres in the school domain are overlapped cognitively as well as physically (**High permeability**)
- Certain roles were rarely bound by specific physical and temporal settings (**High flexibility**)



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Highly Flexible and Permeable Boundaries

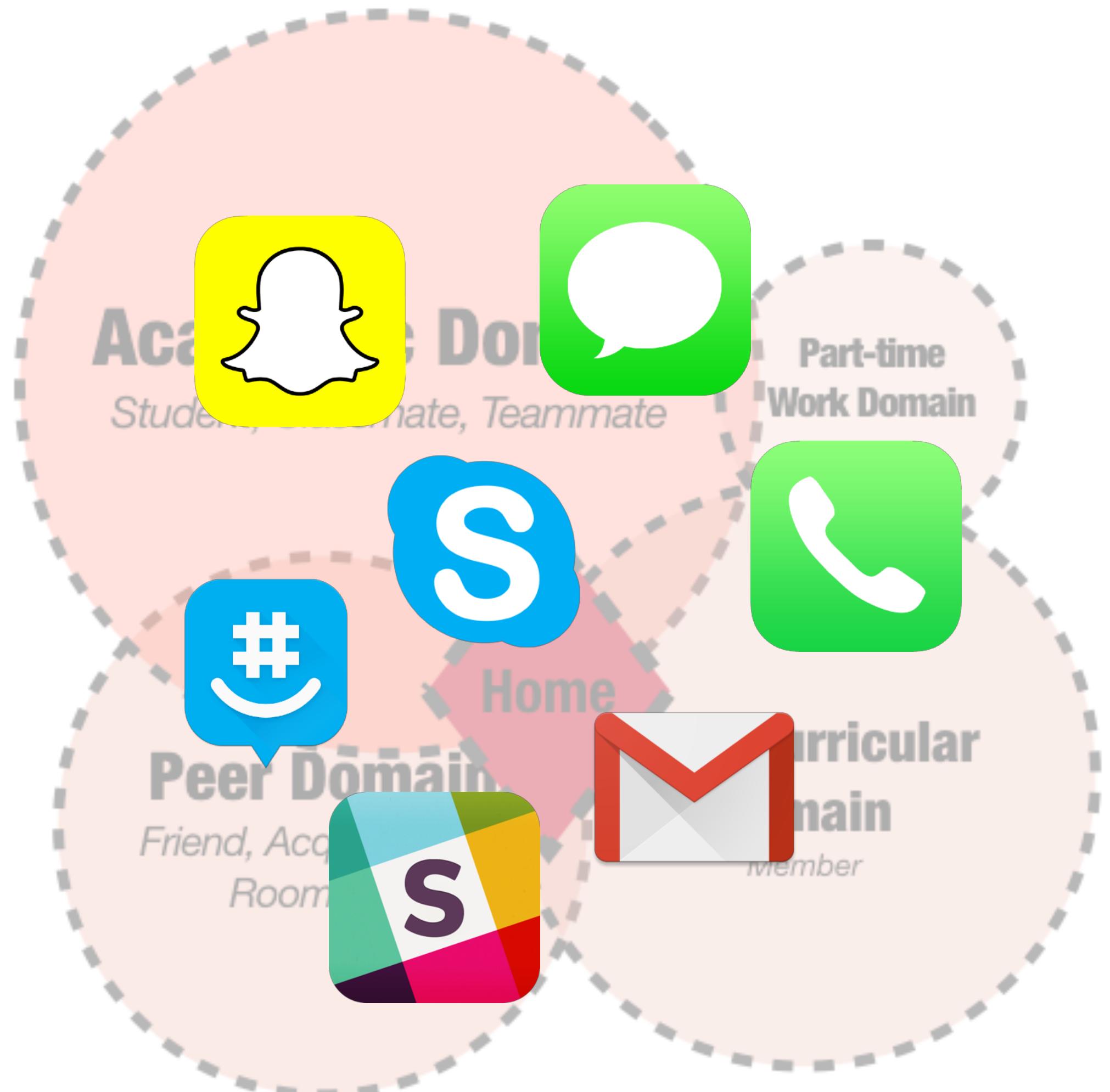


(Home+Academic+Peer Domains)
*The nice thing is that I **live** with my friends.
We all sit around and do **homework** together.
It's like an overlap. You're getting **stuff done**, but
you're also **talking**.*

(P22: Female, Sophomore)



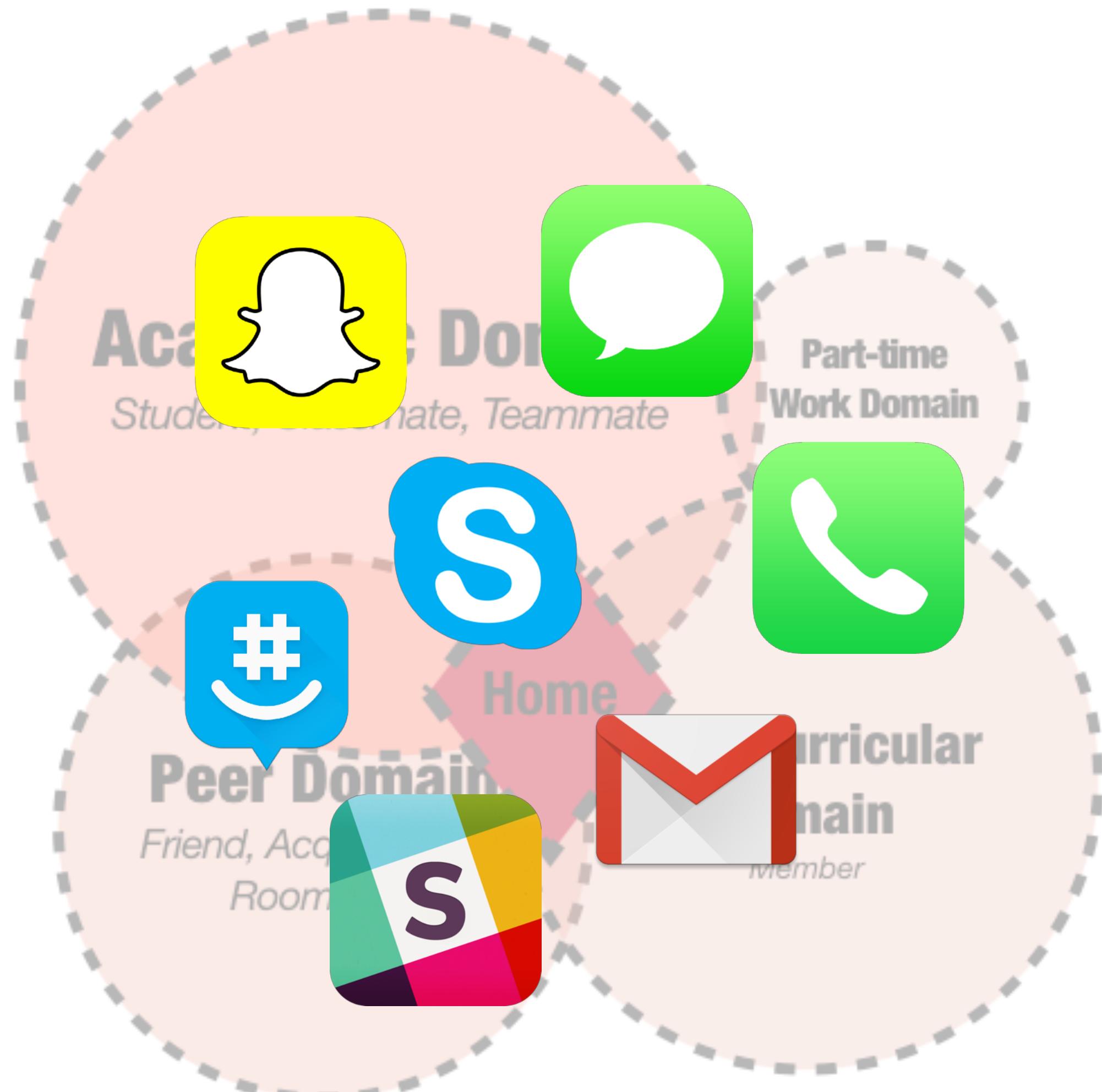
Highly Flexible and Permeable Boundaries



- Communication tools mediated a wide range of social domains (**High flexibility and permeability**)



Highly Flexible and Permeable Boundaries



- Communication tools mediated a wide range of social domains (**High flexibility and permeability**)

(Academic ← Family Domain)

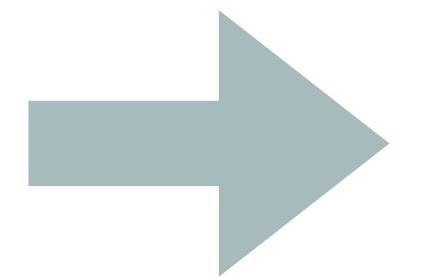
***My mother calls me at very inconvenient time.
She called when in afternoon during the meeting,
so I declined call. And she got upset.***

(P9: Female, Junior)

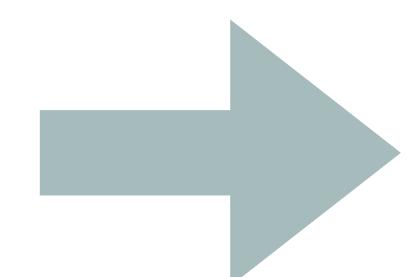


BLURRED BOUNDARIES

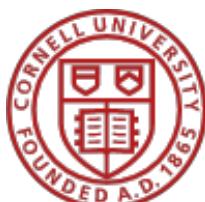
High Flexibility
High Permeability



**Highly integrated and
blurred boundaries**



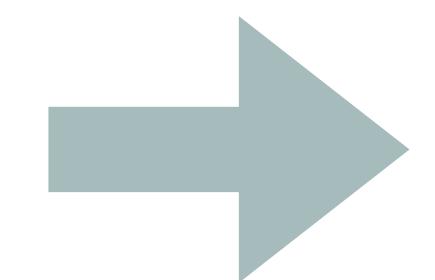
Interruption,
Distraction,
Boundary crossing,
Role overload



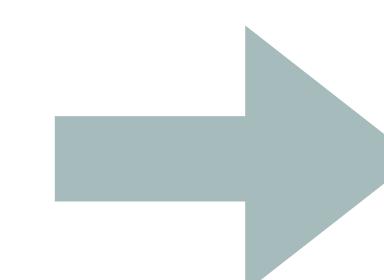
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BLURRED BOUNDARIES

High Flexibility
High Permeability



**Highly integrated and
blurred boundaries**



Interruption,
Distraction,
Boundary crossing,
Role overload



Separation



Integration



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RESEARCH QUESTIONS

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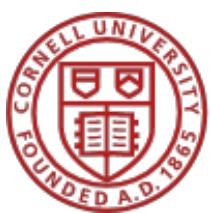
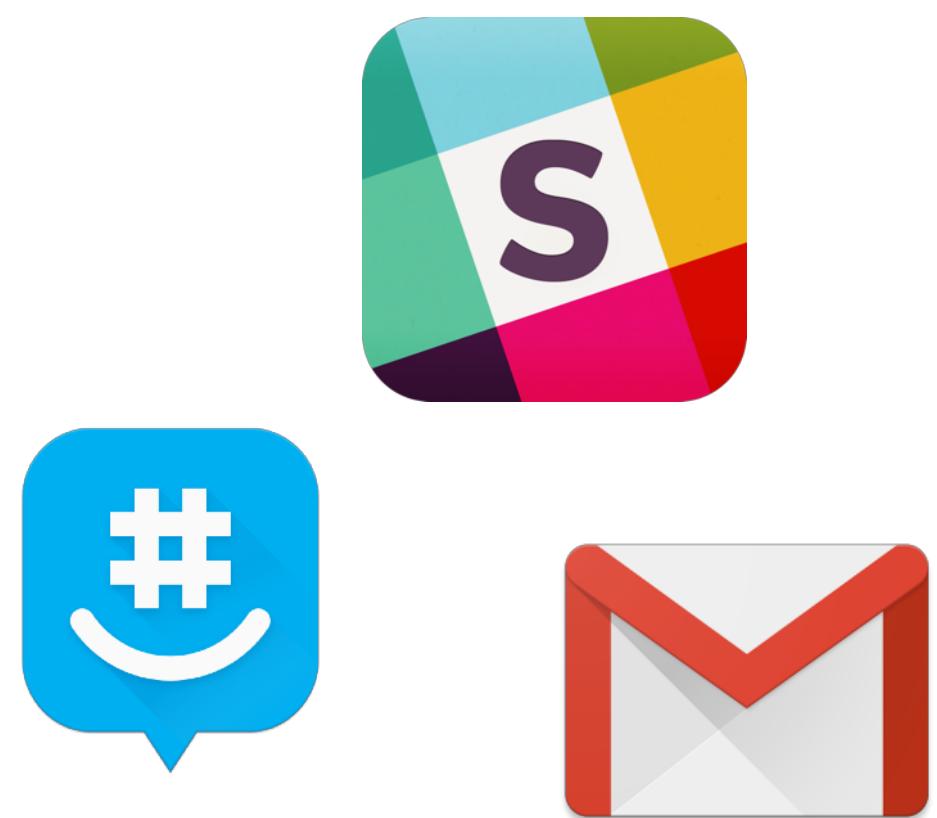
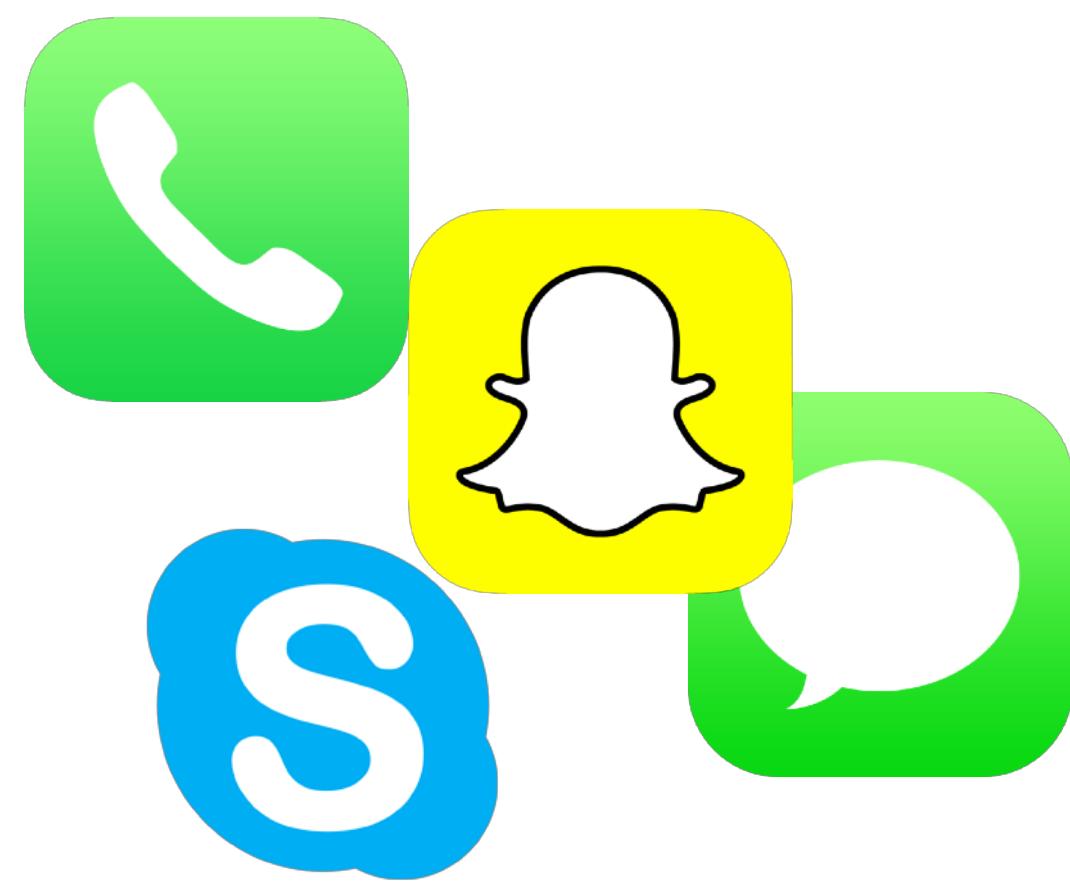
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STRATEGY #1:

Demarcating Social Boundaries by Multiple Communication Channels

Communication tools to **manage** social boundaries

While connected, preventing unwanted boundary crossing



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Demarcating Social Boundaries by Multiple Communication Channels

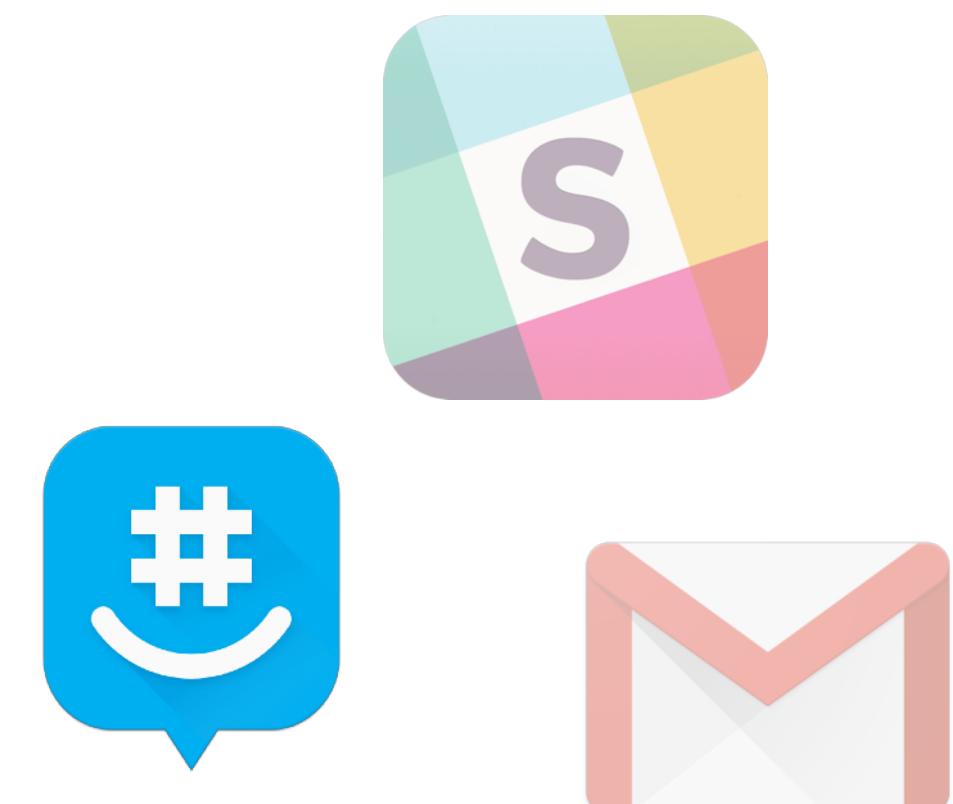
Communication tools to **manage** social boundaries

While connected, preventing unwanted boundary crossing



For Snapchat it's primarily for five of my closest friends. [...] I think GroupMe is incredible, because it's not quite as personal as asking people for their phone numbers.

(P8: Female, Junior)



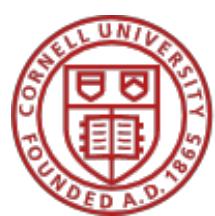
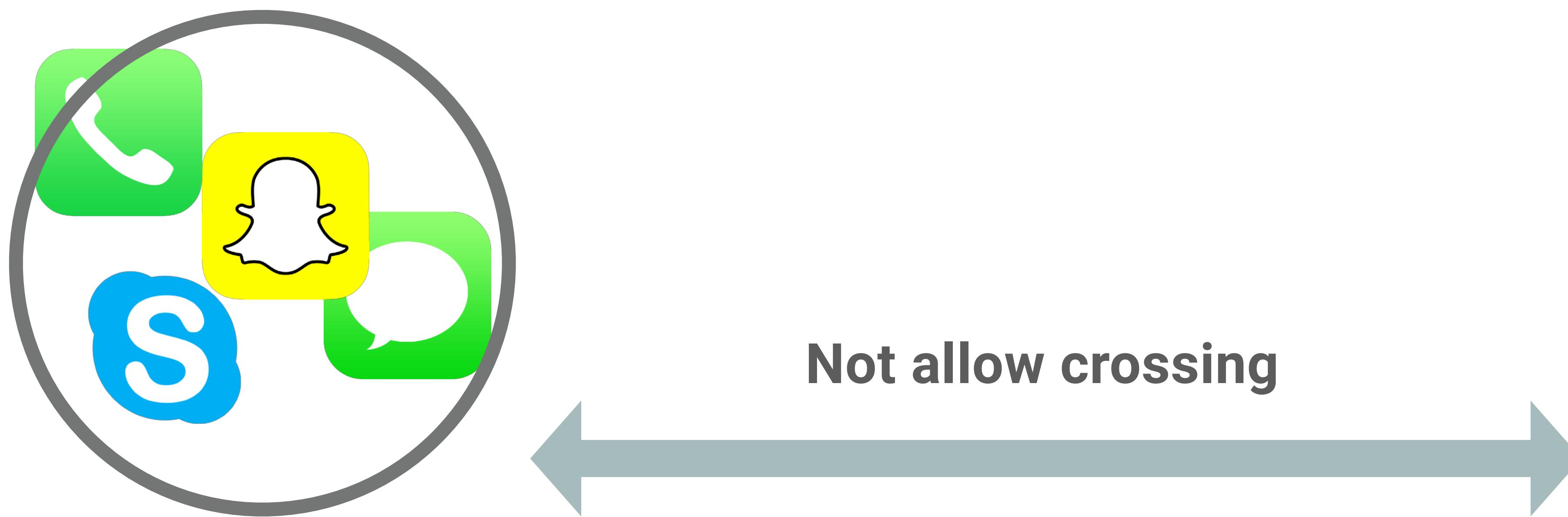
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STRATEGY #1:

Demarcating Social Boundaries by Multiple Communication Channels

Communication tools to **manage** social boundaries

While connected, preventing unwanted boundary crossing



STRATEGY #2:

Defending Academic Boundaries from Distraction

*Messaging are super **distracting**.*

*Every night and morning, I'm checking my email, Instagram, texts whatever, so that's a **bad habit**.*

(P19: Female, Junior)



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STRATEGY #2:

Defending Academic Boundaries from Distraction

Securing academic domains from distraction and interruption

- Temporal technology non-use and disconnection
- Setting cognitive boundaries
- Using blocker applications

*I put my phone on “**Do not disturb**” mode so I won’t get notifications and then I’ll check it during study breaks every hour.*

(P15: Male, Junior)



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STRATEGY #2:

Defending Academic Boundaries from Distraction

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I blocked Facebook on my Chrome for work so I don't go on. If I log on to Safari, I am going to Facebook and it is like my time to reward and distract myself.

(P13: Female, Sophomore)



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STRATEGY #2:

Defending Academic Boundaries from Distraction

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- Temporal technology non-use and disconnection
- Setting cognitive boundaries
- Using blocker applications

I blocked Facebook on my Chrome for work so I don't go on. If I log on to Safari, I am going to Facebook and it is like my time to reward and distract myself.

Sadly, sometimes it didn't work. I opened both browsers.

(P13: Female, Sophomore)



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STRATEGY #3:

Organizing Temporal Boundaries in Daily Lives

Managing Smooth Role Transitions by Maintaining Lists and Calendars

I have a weekly TA meeting so I have a notification on my phone for that.

(P7: Male, Junior)



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STRATEGY #3:

Organizing Temporal Boundaries in Daily Lives

Managing Smooth Role Transitions by Maintaining Lists and Calendars

I have a weekly TA meeting so I have a notification on my phone for that. It's a recurring event in my Sunrise calendar. Every 15 minutes before, it says you have a meeting.

(P7: Male, Junior)

My calendar helps me to manage things but it doesn't help me balance.

(P11: Female, Senior)



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RESEARCH QUESTIONS

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PERCEPTION OF LIFE BALANCE

Goal : Managing both academic and social aspects of their lives

*I always managed to get all my **schoolwork** done, so I still have time to **hang out with people**, talk to **my parents**.*

(P2: Male, Senior)



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PERCEPTION OF LIFE BALANCE

Goal : Managing both academic and social aspects of their lives

Emphasis on self regulation skills

I always managed to get all my schoolwork done, so I still have time to hang out with people, talk to my parents.

I am pretty well-organized so I'm pretty well balanced in that because I know what I need to get done.

(P2: Male, Senior)

A better life balance? I think doing what you have to do on time, instead of procrastinating is probably the most important thing.

(P19: Female, Junior)



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TECHNOLOGY AND LIFE BALANCE:

Technology as a major challenge for the life balance (17/29)

*Not using technology as much has helped me balance my life.
For me, the more I use technology the more I lose focus.*

(P9: Female, Junior)



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TECHNOLOGY AND LIFE BALANCE:

Technology as a major resource for the life balance (8/29)

*Google calendar helps me all the time, it is like my **life saver**.
Otherwise I would forget 100% of things going on.*

(P3: Female, Senior)



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TECHNOLOGY AND LIFE BALANCE

- Technology was perceived as both a resource and a challenge for boundary management and life balance



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FURTHER QUESTIONS

- Technology was perceived as both a resource and a challenge for boundary management and life balance

- What aspects of current technology facilitate and what aspects hinder the development of boundary management of undergraduates?

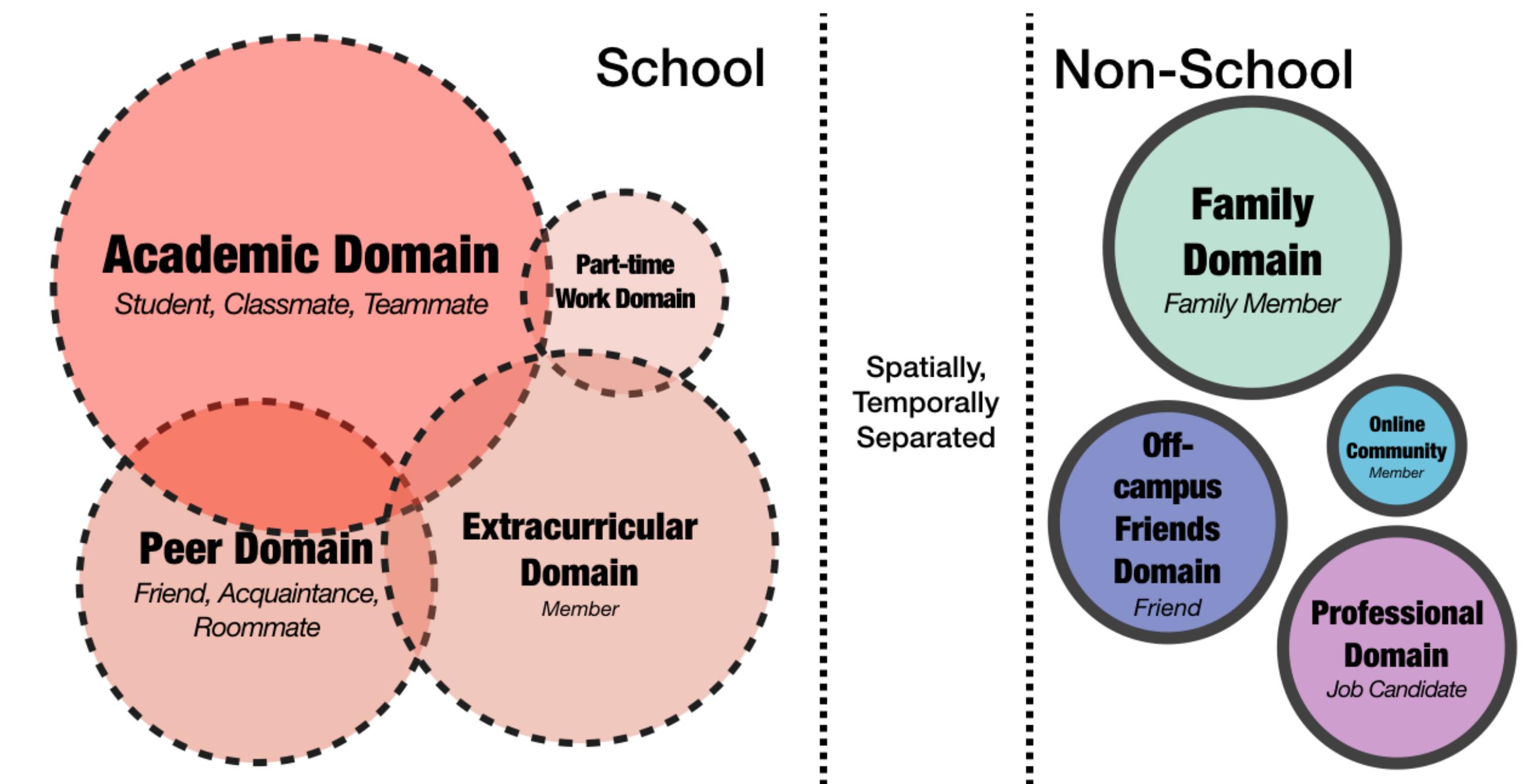
- How can technology be designed to improve students' life balance?



RESEARCH IMPLICATION:

Transient, blurred and dynamic life boundaries

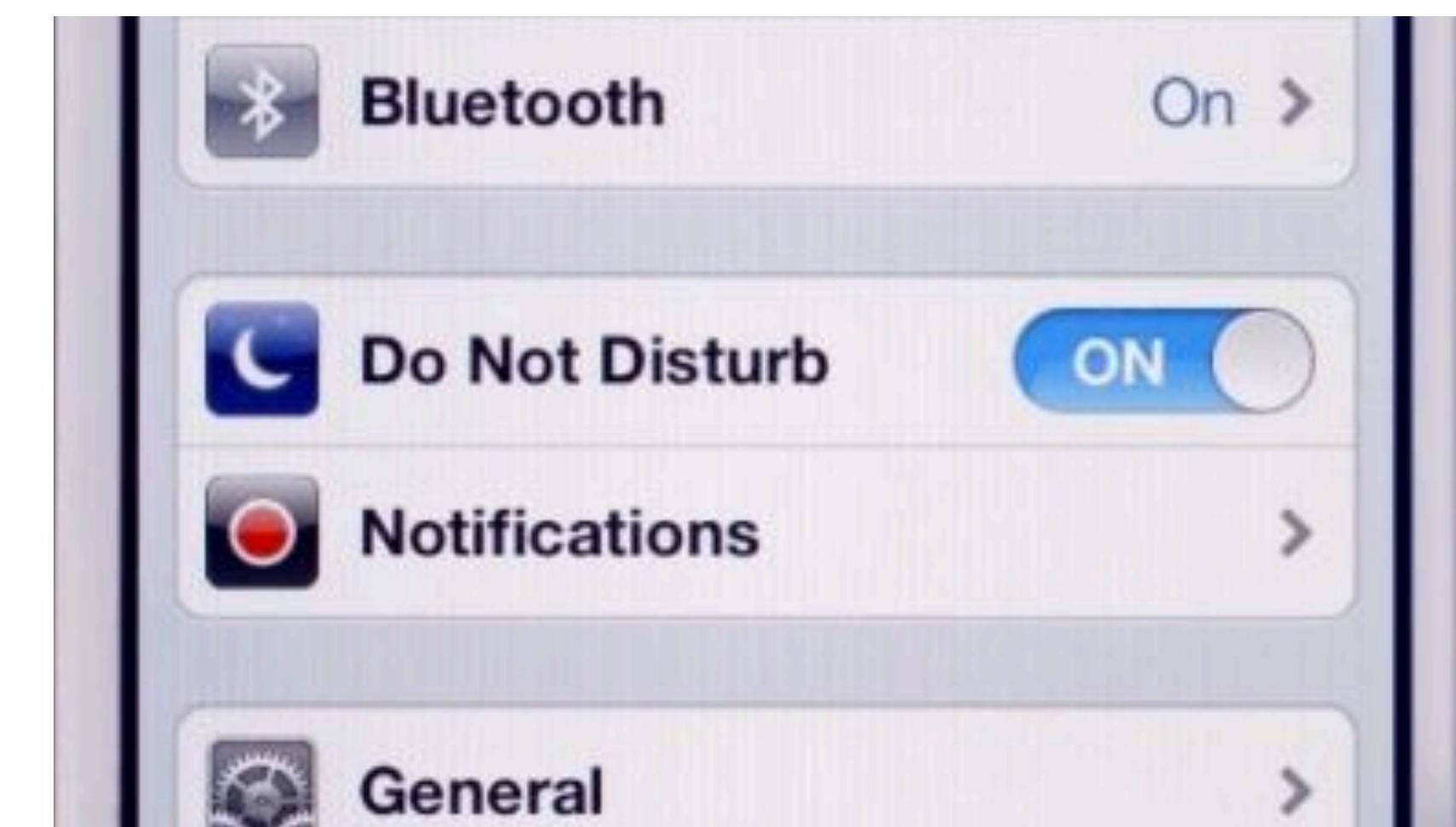
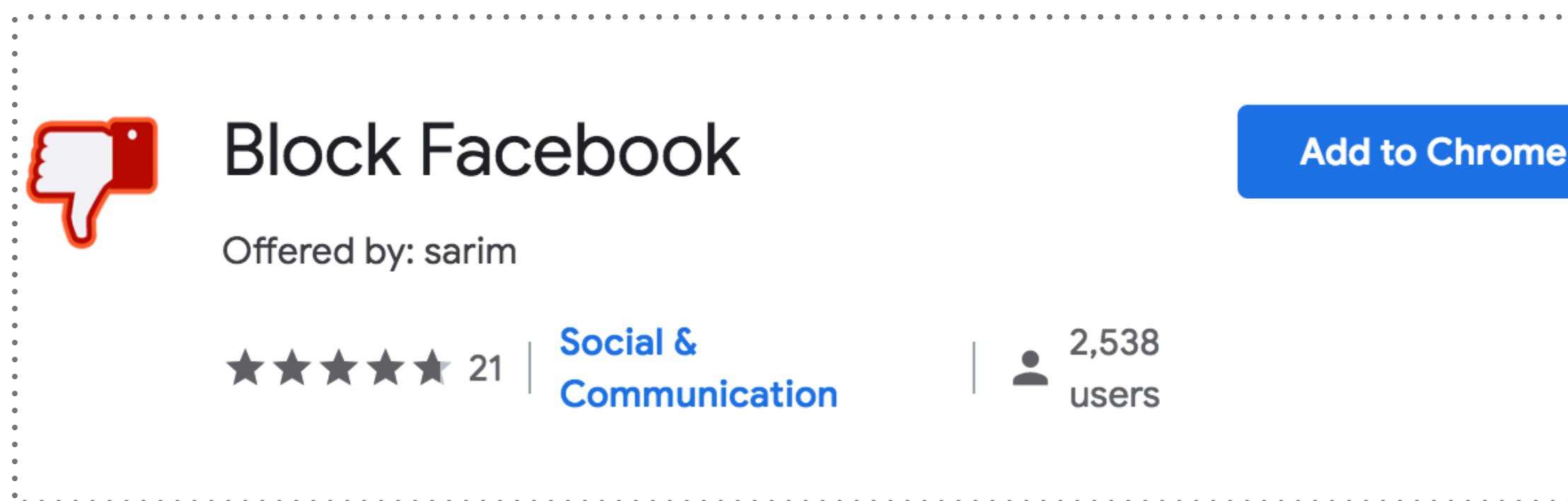
- Future technologies need to take into account a wider variety of life domains rather than focusing home vs. work dichotomy.



DESIGN IMPLICATION:

Technology for flexible segmentation

- Further discussion is needed how technology could support both the boundary integration and segmentation practices flexibly



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<https://chrome.google.com/webstore/detail/block-facebook/gebclbfnlcebcljmgblacllmjkfidoef?hl=en>

DESIGN IMPLICATION:

Beyond supporting self-regulation

- Future systems could help users recognize and consider the various boundaries such as spatial, temporal, psychological, social, and technological. in the creation and maintenance of boundaries





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THANK YOU

We welcome any questions, comments, feedback and suggestions!

Hajin Lim, Ian Arawjo, Yaxian Xie, Negar Khojasteh, Susan R. Fussell | Cornell University
hl934@cornell.edu for the further discussion