COSMETIC COMPUTING
PROVOCATION 03
due 7 may 2019

*Imagine something never done before
by a method never before used
whose outcome is unforeseen*

- Allan Kaprow

Cosmetic Computing is a vociferous expression of radical individuality and an opportunity for deviance from binary gender norms. It is a catalyst towards an open, playful, and creative expression of individuality through wearable technologies. It's a liberation call across gender, race, and body types. Leveraging the term "cosmetics", originally meaning "technique of dress", we envision how intentionally designed new-wearables, specifically those that integrate with fashionable materials and overlays applied directly atop the skin or body, can (and should) empower individuals towards novel explorations of body and self-expression. Unlike many modern traditional cosmetics that are culturally laden with prescriptive social norms of required usage that are restrictive, sexually binary, and oppressive, we desire a new attitude and creative engagement with wearable technologies that can empower individuals with a more personal, playful, performative, and meaningful "technique of dress" — **Cosmetic Computing.**

Are we what we wear? We are awash in a growing tide of wearable technologies from our phones, to watches, Fitbits, and Google Glass. But what are the new wearables that go beyond this vocabulary? Where do they attach? How do they look, feel, or conceal? How do they act, assist, perform, distort, or distract? What are the roles we desire from these new wearables?

Wearable technology is becoming increasingly personal and visible — moving from smartphone "bricks" that we hide in our pocket until we need them to watches, textiles, contact lenses, patches, paints, and cosmetics we openly display. It is clear that new wearable technologies will become closely intertwined with concerns of fashion as well as function. Just as we make coordinated choices about which clothing to wear, we may also find ourselves with different sets of wearable technologies for different days or different activities (office vs date night vs workout etc). It is also not just about a single wearable but an ecosystem of wearable devices. How will your phone, watch, clothing, rings, cosmetics, jewelry, tattoos, and new wearables interact?

In this provocation, you are asked to design a new wearable within this landscape of cosmetic computing. That is, a new physical object (or collection of objects) that are body-worn. By definition, they must be able to be worn on the body. They cannot be variations of well established or existing technologies — they cannot be a new shaped Fitbit for your finger or a smartwatch design with a new screen. They may be a watch or bracelet but they must offer significantly novel interactions and abilities beyond currently marketed products. One way to start your brainstorm is to imagine all of the places on the body you can or might wear "things". This will likely open up a broader conversation of ideas around wearables.

You will face challenges of size, weight, and power. Focus on the desired experience and form for now. We will work with you to enable you to fabricate the most functional prototypes possible within the constraints of the class. We are anticipating a range of debates as to which wearable technologies are in or out of bounds for this provocation. We prefer that you select wearable technologies that you are not familiar with. You will need to check with us concerning all final selections. You are allowed to modify, tweak, hack, or combine existing wearable objects and technologies. Please check with us if you have concerns or questions.

The provocation will be graded as follows:

PRESENTATION:
Each team will have 12 minutes to present in class (10 minutes of critique) on 7 May (1pm–4pm in 210 Jacobs). It is vital that you design and practice your presentation not only for timing but for content, vision, and project quality. You will be allowed to use your own presentation tools. However, as such, you will be graded on how well you operate and interact with your presentation and technology. You are strongly encouraged to review the materials from the *How to Pitch* lecture as to strategies to embrace and pitfalls to avoid. You are free to be creative in your style and method of presentation. In brief, your presentation will include the following (see below). You are free to tackle these in any order you find most effective for your project. You also need to focus on the final design and avoid giving us a strict, temporally accurate narrative of your project's history. Below is one such format:

- Introduce your team
- Describe your users and needs
- Motivate your design and how it is different from existing work. Why should we care?
- Describe your design
- Show a video (1-2 min) of your design in use in context
- Show a live demo of your wearable during the critique
- Describe important issues of your design process such as intermediate designs, user studies findings, technical implementation challenges, etc.
- Summarize potential improvements and end strongly

POSTER:
You must prepare a poster as a single PDF presenting your project that will print in a 30"x40" format (either horizontal or vertical). We are intentionally not providing a template because we want each group to be creative in their designs. Do not send us any other format other than a PDF with all necessary fonts embedded. This is a skill you will need to have as a designer. This poster should stand alone in describing your project. We will use the poster during the public Design Fest session (9 May from 12:00 – 1:30pm in Jacobs). As a designer you are fee to choose how you wish to communicate your idea and represent your project.

Be visual with your poster design. Ask yourself how often you have read all of the text on a poster and then find visual ways to remove text and maintain content. Your poster should contain images

that illustrate your design. However, don't be so minimal that it is just two or three images. You need the poster to convey the passion and vision of your project even if you are not there to explain it. Posters will be graded as follows:

- Does the poster clearly communicate the project?
- Were adequate visual elements used?
- Does the poster make good use of graphic design elements in terms of fonts, layout, and color choices?
- Were the required elements included on the poster?

We will print all posters. To allow time for printing, all poster files are due on Monday, 6 May, 11:59pm. Please upload to bCourses.

REPORT AND VIDEO:
By Saturday, 11 May 11:59 you must upload all additional materials and a final project report. An outline of the final materials is as follows:

- A title and tagline (10 word max) for your project
- One paragraph of text describing your project (250 words max)
- Documentation describing your observations. This can be a mixture of text, images, sketches, interviews, etc. It should capture what motivated your design.
- Design process documentation (intermediate designs, sketches, ideas)
- A stand-alone video describing your project and showing it in use in situ (2 min max)
- An instructables style process document describing the step-by-step making of the work that includes any code, STL, cut, or modeling files needed to make the project
- High-fidelity images of your final design using the light box
- A conclusion that addresses any missed opportunities, cultural, or other design issues

OVERALL GRADING:
Grading across all materials (presentation, report, video, demo, etc):

35% Quality and originality of idea
20% Execution of object design and interactivity
15% Critique Presentation
10% Video
10% Poster
10% Documentation