

22-24 sep.'25 university of aveiro portugal



# Designing the world precedes designing the word: The Paulo Freire Method applied to typography education

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**Abstract:** This paper describes a critical pedagogy design experiment in typography education in a public university in the United States of America. Inspired by Paulo Freire's claim that reading the world precedes reading the word, typography was reframed in this experiment as a designing of the world through designing the word. To design words this way, graphic design students need first to re-read the designs of their worlds, have something to say about that, and then critically embed their (designed) word into their (designed) world. This experiment builds upon the critical design pedagogy program set forth by the Design & Oppression Network, to which this research adds a reflective description of teaching typography to graphic design students. This research stands as a first attempt to adapt the Paulo Freire Method to graphic design education, particularly its foundation on generative themes, words, and images.

Keywords: critical pedagogy, design education, typography, graphic design.

#### Introduction

Typography is the written form of ideas (Ambrose & Harris, 2006), through which history and culture are communicated in symbolic languages (Turgut, 2017). Typography is one of the primary design technologies through which graphic designers communicate their languages artistically and innovatively (Chen et al., 2012). As such, it is a central component of graphic design majors in the United States of America, which inherits the Eurocentric, male-dominated, artifact-based, and professionally-oriented modern histories that justify design for industrialization and commercialization (Griffin, 2016). Justified by those histories, modern design aesthetics prioritize high contrasts, clean visuals, geometric forms, and sans-serif typographic specimens. Legibility and information-transmission efficiency are paramount because the overall intention is to communicate the dominant language, culture, political views, and religion (Mandel, 1993). Typography education follows (and supports) this industrial practice. Graphic design students are largely trained to design the word without reflecting on their world.



Not all educators agree with the industrial-compliance approach of graphic design education, though. There is a considerable stream of research into developing critical thinking in design education (Wood & Haylock, 2020), posing social issues, instead of solving problems, through graphic design education(Laranjo, 2017), promoting reflection on the positionality of future graphic designers (Mercer & Moses, 2023; McCarthy & Almeida, 2002) as well as promoting interdisciplinary practices in education (Rosner, 2014).

The design research program developed by the Design & Oppression Network (Van Amstel et al., 2021; Serpa et al., 2022; Mazzarotto and Serpa, 2022; Mazzarotto et al., 2023; Dos Santos et al., 2023; Mazzarotto, 2024) stands out in this regard. Building on the tradition of critical pedagogy pioneered by Brazilian educator Paulo Freire, this program counters what Freire called the banking style of education: teachers transferring content to students' heads, as if knowledge were a valuable commodity that could be deposited in students' accounts for future use. Everything students bring to class is ignored in favor of the knowledge codified in the teachers' words. In contrast, Paulo Freire's literacy method starts from the everyday reading of the world to learn to read the word (Freire & Macedo, 2005). In it, the word becomes a medium to enrich the reading of the world rather than being the goal of education. To the best of our knowledge, there is no documented attempt to adapt his literacy method to typography education, despite the obvious relevance of the world-word relationship found at its core.

This research gives the first step in that direction by reporting and reflecting on a critical pedagogy design experiment. According to Jalali and colleagues (2025, p.3), this kind of experiment is "a participatory action research process of problematizing, naming, speaking, and transforming the world not just with new words but also with new artifacts". The experiment was conducted by the first author and analyzed in collaboration with the second author, both graduate teaching assistants and MFA design researchers in a Design and Visual Communications program of a public university in Florida, United States of America. Most of the students in this program (77%) are immigrants from Global South countries. The first author is from Vietnam, and the second author is from Iran. Motivated by the desire to question the modern (Global North) canon in design education, the first author took the initiative to experiment with critical pedagogy in Typography 1, a foundation course in the graphic design undergraduate track. The second author closely followed the experiment to prepare for teaching the same course. The third author, a Dutch-Brazilian man, supervised the two teaching assistants, taught critical pedagogy in their graduate studio, and assisted with research writing. The teaching practice reported here spans two semesters—Spring and Fall 2024—a moment when critical pedagogy was curtailed by Florida state policies.

#### **Research context**

In the graduate design studio, the third author organized several seminars on codesign with literature reviews, discussions, and design experiments. In the experiments, graduate students designed something together—most typically a collaborative visualization—using unusual materials, like Lego building blocks (Figure 1). Lego Serious Play (LSP), a playful method to re-read worlds using metaphorical models (Ponce-Camacho & Lopez-Leyva, 2023), was often used in these experiments. By engaging with LSP and other codesign methods, graduate students stepped away from the tools of the graphic design trade—e.g., Adobe software—and opened their design spaces to the bodies and contradictions neglected by industry practice. Through the seminars, the graduate cohort realized the prevalence of the banking style of education (Mazzarotto and Serpa, 2022) and the coloniality of making (Saito et al., 2024) in design education. They gradually reflected on their collective positionality as Global South designers and became more critical of their creations with modern aesthetics, high-tech, and so on.

Graduate students were encouraged to bring over these findings to the undergraduate studio, where they play the teaching assistant role. As Global South female designers, the first and second authors initially wanted to study and share their experiences with non-Western typographies. However, doing so risked perpetuating exoticism (Said, 1977) and misogyny (Bow, 2019) in representing non-modern aesthetics, like typically done in the US neoliberal and multicultural graphic vocabulary (Melamed, 2006; Kymlicka, 2013). Learning Global South cultures from Global South representatives like us could correct exoticism; however, the political climate in Florida discouraged us from doing so.

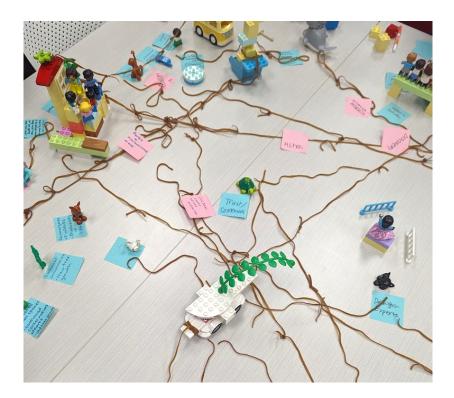


Figure 1: Lego Serious Play experiment in which graduate students mapped their design research projects, February 2024.

Since 2021, critical race theories and similar frameworks have been forbidden or discouraged in the Florida state higher education system (Varsha, 2023; Watson, 2023), while Science, Technology, Engineering, and Math (STEM) have been excessively emphasized (Barger et al., 2006; Lurz, 2018). In this conservative neoliberal environment, we thought typography education was expected to remain about designing the word, not designing the world. By reading the world through the dominant narratives in modern, functional, and colonial aesthetics, typography education could impose the industrial (or commercial) ways of reading and designing the word to students. Questioning the world instead of the word is deemed inefficient, ideological, and off-topic by such neoliberal conservatism. Even when the student body genuinely shares an interest in learning and practicing design from other cultural lenses, the in-depth reading of other cultures is restricted by the semester-based graphic design education: 16 weeks per semester, 6 hours of studio time per week, and, especially in the typography studio, 3-4 projects. That is why both teaching assistants decided not to bring their worlds to the studio but, instead, to stimulate students to bring over their worlds.

As Jordan and Henderson (1995) emphasize, understanding interactions such as design studio instructor-student artifact-mediated dialogues requires careful documenting that captures both social interactions and the material context in which they occur. Following this method, we registered studio interaction through photographs, journaling, and reflective dialogue. Students' formal permissions were obtained to include their work in the study, with the agreement to preserve identities. As a graduate teaching assistant, the first author's teaching assignments were examined by design faculty through remote supervision in curriculum design and class visits. During this process, the first author contacted the design faculty, especially the third author, who introduced Freirean critical pedagogy to her, for questions, feedback, and long-term advice on the design education field. The second author acted as a dialogue partner to the first author in the interaction analysis. At the end of each course, per the university's student-centered initiatives and policies, the first author received anonymous, digital course evaluations from design students, which are often reflected on for course revision. In reflection, the teaching assignment was interdependently built from the design program, confided in the teaching assistants' knowledge in the design industry, experience in design education, and autonomy in design research.

## Reading the world precedes reading the word

This research follows Paulo Freire's often-cited claim that "reading the world always precedes reading the word" (Freire, 1983, p.5). Originally devised for adult literacy programs, the Paulo Freire Method emphasizes reading the world as the foundational act of self-education. Before learning to read the word, learners re-read their worlds by seeing and discussing images or photographs of a generative theme, a topic that could generate dialogue, debate, and action in the learners' community. These visual codifications, or generative images, as Freire called them, raised the cultural relevance of the objects around them, particularly, the overlooked. After that, a carefully selected word describing an object of dispute was discussed and then explored as a word composed of combined letters. The word was extracted from the learners' vocabulary universe and displayed in a slide projector with its building blocks, the phonems (Figure 2). This word was called a generative word for the possibility of altering its vowels and consonants and generating further words.

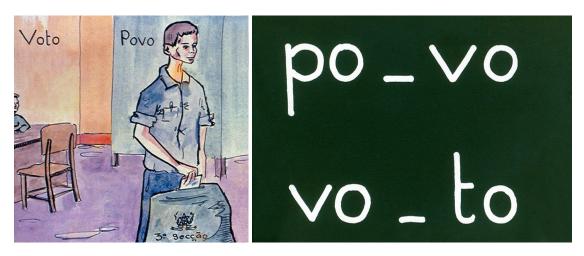


Figure 2: A generative image (left) and a generative word (right) used by Paulo Freire and colleagues in his foundational literacy experiment in Angicos. Reproduced with permission from the Paulo Freire archives (https://acervo.paulofreire.org/handle/7891/607).

For instance, Paulo Freire and his colleagues employed the word *voto* (vote) in Angicos (see Figure 2), a city in Northeastern Brazil, where the method was consolidated. In the 1950s and 60s, 40% of Brazil's population was illiterate, and there was a law preventing them from voting—if a Brazilian person couldn't read and write, they couldn't vote. Although the word "voto" (vote in Portuguese) was campaigned by politicians as hope, it became meaningless to a rural community of mainly illiterate people who read their world by experiencing it (Freire & Macedo, 2005). Once they learned *voto*, Angicos students could also learn reading *povo* (people), as this second word shares a common phonem [*vo*]. In that way, their learning process was always gradually developing from what was already known and from what was needed—the purpose of reading was to vote.

In response to the political restriction, Freire's approach to the adult literacy program made the illiterate people see themselves as part of the world, which meant they could change the world once they recognized it wasn't a fixed envelope. When the learner sees themselves as a part of the world, they know that their changes change the world. For instance, learning how to read meant voting and having a wider impact in the future of their community. Decoding the words through dialogues means *re-reading the world* encoded by the word and revealing the contexts behind texts. Freire emphasizes the learners' ability to read the world creatively and critically, instead of simply reading the words delivered by their teachers. He suggests that the teacher assists learners in reading themselves in reading their world. That way, reading the world was always a re-reading of the world and an opportunity to transform the world (Figure 3).

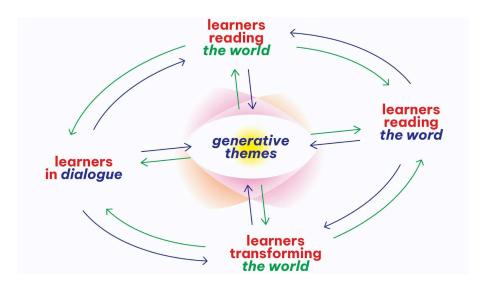


Figure 3: A visual summary of the Paulo Freire Method for critical literacy.

## Designing the world precedes designing the word

As introduced before, graphic design education is based on the modern design approach in which graphic designers give legible forms to content they are not responsible for (Moles, 1986). This alienated work attitude sustains the coloniality of making in society (Saito et al., 2024) and the banking style of design education. While facing this reality in the graduate studio, the first and second authors felt confused and exhausted. As they reflected on the design work and ourselves as designers, they conducted this and other design research projects, describing their lessons, positionalities, and words. This was the first time that the first author experienced liberation in design education with her studio-mates, which encouraged her to share this experience with her undergraduate design students. At the hybrid position, graduate student and graduate teaching assistant, she replicated and expanded several design experiments led by the third author and studio-mates, while documenting course observations, reflections, and revisions.

This research describes and reflects on the series of experiments done to adapt Paulo Freire's literacy method to typography education. In critical graphic design pedagogy, the design studio typically becomes like a culture circle (Freire & Macedo, 2005; Fonseca Braga et al., 2024), in which design students have the chance to see themselves as cultural producers and not just consumers. Students are supposed to transform their world by taking critical command of word design—typography—as well as self-design—their identity. Typography, in this approach, means learning, first and foremost, to change the world by (re)naming the world while designing it otherwise (Figure 4).

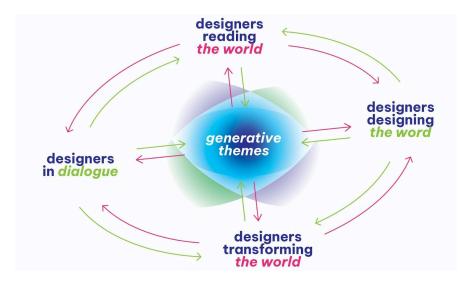


Figure 4: Critical graphic design education inspired by the Paulo Freire Method.

## Re-reading the world in the typography design studio

For the first time the first author taught Typography 1, she closely followed the ready-made syllabus assignments devised by another faculty member focused on developing design principles, branding design strategy, and design thinking (summarized in Table 1). There were seven students registered for this typography course, most of whom had already taken foundational graphic design courses and expressed their interest in being admitted to the Bachelor's degree in graphic design track, for which this class was a requirement. A couple of students, however, were on a studio art track and had limited knowledge of this track, posing a challenge for them to keep up with the project timeline. During the semester, there were three main projects, along with several assignments dedicated to specific Adobe programs for students to learn the digital design space and practice typography accordingly. At the end of the semester, students created an art and design portfolio in a booklet form. Besides these projects and assignments, the first author gave lectures on principles of typography, typesetting, and editorial design while performing live tutorials on digital tools such as Adobe Illustrator, Photoshop, and InDesign with students collectively and individually. The second author indirectly followed the course activity through several informal conversations with the first author.

Table 1: The Typography course syllabus, including the tentative version designed by a faculty member (top) and the later adjustments by the first author during the semester (bottom, lighter background color), Spring 2024.

adjustments by the first author during the semester (bottom, lighter background color), Spring 2024.					
Syllabus descriptions		Goals	Final deliverables		
Project 1: Local Lettermarks	Original	Gather a personal library of inspiring letterforms, then use these as a springboard to design a lettermark for an imaginary local start-up or small business. Add typography (to spell out the business name), color, and simple animation. Display the results using the provided InDesign template with style sheets, as well as showing the solution in context at large and small scales.	Image library of 12+ images; multiple ideas, sketches, and revisions; 1 finalized lettermark in color and b/w; mockups and simple animated .gif of final lettermark; combined .pdf of deliverables using InDesign stylesheet.		
	Proposed & Adjusted	Students are encouraged to gather inspiration from local letterforms, translate that inspiration into a lettermark for a fictional small business, and effectively apply typography, color, and simple animation to the design.	A business letter mark.     A GIF animation of the letter mark.     Brand guidelines of an imaginary local business     Presented & uploaded on the class Notion page.		
Project 2: Creative Heroes	Original	Design 4-5 iPad Pro screens for display online, introducing a "design hero" to an audience of graphic designers. Assets: two typefaces, one image, and written content as described in the project brief.	One 12x18 poster print resolution .pdf, and one assembled, re-designed packaging.		
	Proposed & Adjusted	From a body mapping activity (Figure 5), pick a product package linked to your lived experience to redesign. You might imagine a new product that is not available in the market yet.	A redesigned package (print, CMYK).     promotional poster of the package (tabloid, CMYK)     Upload to the class Notion page.		
Project 3: Package Mix	Original	Purchase an item for \$2 or less. Using only a single type family, the words originally printed on the item's packaging, and no image information: (1) make a 12x18 poster reflecting its original intent, and (2) radically rebrand/re-imagine your product by creating a new packaging. The redesign should have a conceptual goal centered around social critique and/or drastically shifting the target audience for the item.	A PDF of the static content, a .gif of the "splash screen" animation at 800px wide, and an interactive PDF with an .mp4 version of the animation embedded in the first page, set to auto-play.		
	Proposed & Adjusted	All students will collectively design an exhibition demo version of "Design Heroes," introducing the creative individuals to an audience of graphic designers through digital and print materials.	1. An infographic poster (24x36 in, CMYK, printed) about the designer's impacts on the creative community.  2. A 3-5 page digital document introducing a "design hero" to an audience of graphic designers. The document will be optimized for viewing on a 10.5-in iPad Pro.  3. A project case study on the class Notion page		

Throughout the semester, the syllabus was updated several times according to student input and output. For example, in response to *Project 2: Creative Heroes* (Table 1), one student shared that they (preserved pronouns) struggled to create meaningful branding for an event they had never actually organized or facilitated with communities or organizations. Students expected to master their design skill sets and struggled with understanding the cultural contexts of graphic design: *What makes a community? What does a community want? How does graphic design represent a community? What is the role of typography in this task?* Students' questions made the first author realize that many graphic design projects in the studio involve mimicking professional practices without students' authentic engagement with community members as design collaborators. This conclusion resonated with her experiences as an undergraduate student as well as professional design practices, when graphic designers usually received tasks from creative directors or colleagues from other departments and finished them by the due time. Most of the time, both designers and colleagues gained inspiration from common design platforms such as Behance, Dribbble, Pinterest, and Instagram, without much communication with prospective users.

While students managed to accomplish these tasks professionally, this practice reduced designing the word to the modern design of the world. Even when gathering non-modern styles in their inspirational mood boards, they could not avoid fitting them into modern frames. Mastering graphic design software entails mastering the modern aesthetics behind the software functionality. Students must reproduce this aesthetics while following the publicly available software tutorials, for example.

In an attempt to break this colonial reinforcement cycle, the third author typically employs low-tech materials in his critical pedagogy design experiments. In his view, low-tech materials set aside modern aesthetics enforced by high-tech design tools like the Adobe software suite, allowing more room for expressive creative-making, critical dialogues, and genuine connections among designers. The first author liked this approach and decided to bring them to the undergraduate studio to support teaching Typography 1.

While not yet realizing these materials made so much of a difference, the first author started to adjust several design experiments from the graduate studio and applied them as workshops in the undergraduate studio (Table 1, Project 3). In the first phase of Project 3: Package Remix, the author adapted the body mapping method used by Gunn (2018) and Sanabria (2024), former graduate peers, as the body mapping activity for a design project. During this process, students used low-tech materials to visualize their bodies, their lived experiences, their lives, and their dreams in which a life-based designed product is introduced (Figure 5). As students left the computer and moved across the studio, they were initially hesitant but soon grew curious to engage with the non-digital materials in portraying themselves. The body maps provided contexts for students' design processes, which the first author started to refer to when students reached out for feedback.

According to bell hooks (2014), a collaborator of Paulo Freire, the body is the station where lived experiences are engraved, viewed worlds are documented, and ways of knowing are created (p. 89-92). Students reread their worlds through the common desires in their struggles, especially the lack of time for sleep, homework, friend & family gatherings, and other social practices. As a result, they tried to solve these problems in their subsequent product package design projects. The body mapping activity encouraged students to bring more of their everyday lives to the studio. As the first author was taught in the banking education model in Vietnam public schools, small talks were usually deemed irrelevant and needed to be eradicated in classrooms. However, in this case, small talk encouraged students to seek each other's feedback on designs. They became more explorative with design forms as they practiced package design.

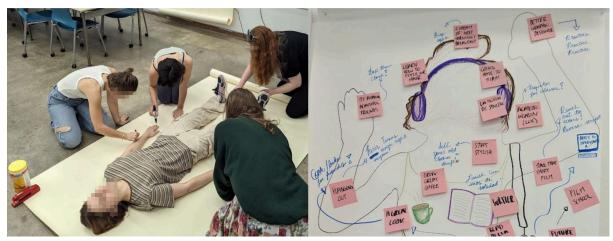


Figure 5: Students supported each other in the body mapping activity (left), even though they knelt on the cemented floor. Then, each student linked their bodies with daily activities (doodes) and design objects (sticky notes) as a part of the project brainstorm.

By the end of the semester, the first author noticed that most students were more confident in designing words for product packages when these words expressed their lived experience of the world in which the packaged is supposed to exist. Still, some students did not confidently present their works as they felt obliged to follow the aesthetic principles that were introduced by the first author and the graphic design works on the digital design tools mentioned above. The designed words followed modern design principles such as: sans serif for sleek brands; avoid script fonts and uppercase settings to improve accessibility; high-contrast type color schemes; as well as consistency in graphic design elements. These principles restrained word design to the industrialization and commodification of the designed world. The teaching assistants brought this contradiction to their graduate studio as a generative theme to discuss with others, and a new version of this course came out of that.

## Redesigning the world in the typography design studio

Soon, graduate students realized there is a historical gap between how we talk about design, including the words we use, and the actual worlds we're designing from and to. The world of design is not the design of the world, or to put it in other words, it is not the "real world" (Papanek, 1985). The world of design has its own lingo, such as "user experience," "functionality," and "market fit," that bears little correspondence with the language of everyday life. Banking design education distances students from everyday life and the design of the world so that they can dwell in the world of design, where words conform a closed system of meaning. Design students are drawn into speaking those words through their designs, even if they don't fully understand what they mean outside that enclosed world. They are trained to give form to someone else's words instead of speaking their thoughts (and expressing their beings) through their designs.

The design of the world is reduced to the world of design because self-actualization and world-reading are absent from banking design education. Design education often asks students to create solutions for hypothetical, middle-class users in the world of design while ignoring the diverse crowd struggling to exist in the current design of the world. With the support of the third author and her graduate peers, the first author adjusted the course syllabus with more emphasis on students' worlds as the design space and more opportunities to speak (and spread) the word (Table 2). High-tech tool-based assignments were replaced by codesign workshops with low-tech materials that supported students in their rereading of the world.

Table 2: The Typography course syllabus, including the adjusted version from Table 1 (top) and the later adjustments made by the first author throughout the semester (lighter background), Fall 2024.

Syllabus descriptions		Goals	Final deliverables
Project 1: (Crisis) Representation	Proposed	Students will explore typography's role in identity representation. You will create a series of letter marks that embody a cohesive theme or concept. This series could function as brand identities for an organization closely aligned with your interests.	A series of lettermarks (RGB).     Mockups showcasing their potential applications (RGB).
	Adjusted	Students will explore typography's role in crisis representation, closely linking to their lived experiences and societal positionality. Through research and practice on both manual and digital platforms, students will create a series of typography that cohesively embody crisis-based messages. This series could function as the brand identities of a campaign or an organization closely aligned with students' interests.	A project case study (Google Doc).     A series of typography (any size, CMYK, print).
nt and Animation	Proposed	Students will research the use of typography in social movements. They will practice lettering and typesetting as tools for expressive and critical communication within social groups. By collecting and annotating media resources related to a chosen social movement, students will design materials that promote counter-narratives.	1. A poster (18x24 in, CMYK, print) to be displayed in a public space, raising awareness of the counter-narrative. 2. An animation of a relevant quote (1920x1080 px, RGB, web) to be displayed on digital platforms.
Project 2: Movement and Animation	Adjusted	(unchanged)	A project case study (Google Doc).     A poster (24x36 in max, print)     An animation (any size, web, QR code access).
Project 3: Package the Gap	Proposed	Students will select a product package from their daily lives and redesign it with a critical understanding of its impacts on consumers and society. This process encourages them to reflect on consumption habits, research product manufacturers, and critically examine the social contexts of products. By identifying the gaps between original marketing statements and the documented social impacts of the products, students engage in typography to convey a more nuanced understanding of design, consumerism, and sustainability.	A new product package design (various sizes, CMYK, print).     A magazine spread (CMYK, print).
Project 3: Pa	Adjusted	Our world is now packaged with endless options of products, allowing us to consume constantly and thus have common interests. But, what about the products that have been lost? In other words, the cultures and generational stories that don't have a chance to be reproduced through industrialization? This is your mission to bring such forgotten cultures to the "current market" and give a "skin" to such forgotten memories.	A project case study (Google Doc).     A package design (any size, CMYK, print, and installed for interactions).

The principles of typographic design were constructed through project-based reading quizzes where students selectively learned what was relevant to their world design. Instead of lecturing on these design principles, the teaching assistant encouraged students to abstract from seeing many examples on websites such as Pinterest, Instagram, Behance, and Dribbble. Instead, in lectures, the first author shared her professional experiences in practicing design, with rich accounts of workers' alienation and banking education, as well as ways of overcoming the alienation through critical thinking, researching, and exploring design processes. This approach turned out to be more effective in stimulating dialogue, as the instructor did not embody a ready-made perfect knowledge (e.g., a design principle). Interactive, critical design toolkits were incorporated in the studio as well as several field trips for students to expand their readings of the world beyond the design studio in institutional spaces (Table 3).

Table 3: The final course schedule of Typography 1, Fall, 2024. The background colors correspond to the same of projects listed on Table 2.

Date	Brief descriptions of class sessions	Design materials
Aug 22	First day of class: Read your world and you within that world.	Lego Serious Play, sticky notes, tracing papers, and tapes
Aug 27	<b>The research phase of project 1:</b> What are alternative ways of designing yourself and your world?	Papers, sticky notes, color markers, tracing papers, and tapes
Aug 29	<b>Check-ins with students, project 1:</b> Let's reread yourself and, thus, reread your world.	Papers in a pamphlet form, color markers, and sticky notes
Sep 3	<b>Check-ins with students, project 1:</b> Pinpoint your existential crises and design your words that communicate such crises.	Paper, markers, sticky notes, and colored tapes
Sep 5	<b>Check-ins with students, project 1:</b> Reread your studio-mate's generative words of their existential crises. What can you read about their world?	Miro board, digital screenshots of students' processes
Sep 10	Intermediate review of project 1: Test print and display your designs. Give feedback on how words can be redesigned to describe your creativity in reading your world.	Prints of students' projects, tracing papers, and color markers
Sep 12	A guest lecture on low-tech design by a senior undergraduate graphic design student who shares her aesthetic approaches in the design portfolio.	Bookmaking materials
Sep 19	Field trip observation for project 2 (at the local art museum with graduate design students): Read and reread the social issues through others' artworks.	Field notebooks from Sep 12, the local art museum
Sep 24	<b>Research phase of project 2:</b> Through literature review on specific social issues, read others' worldviews, not through design languages and principles.	Printed reading, color makers
Oct 1	Research phase of project 2: From others' readings of the world, what are your readings of the world and the social issues that are embedded in such a world? How do you want to design the world alternatively?	Lego Serious Play, Beautiful Troubles (Boyd & Mitchell, 2013), and sticky notes
Oct 15	<b>2:1 check-ins with students, project 2:</b> Design the word to describe your world-reading and world-designing. Word design is discussed and given feedback among a small group of two students and an instructor, which is called <b>2:1</b> check-ins.	Feedback cards (cite needed), Lego Serious Play animals, and sticky notes
Oct 17	Intermediate review of project 2: From your studio-mates' word design, what are alternative ways of rereading their worlds and, thus, redesigning the worlds and words?	Prints of students' projects, sticky notes, and color markers
Oct 29	<b>Final critiques of project 2:</b> Read the words, as posters, designed by strangers in the hallway of the design building. As non-designers in this context, how would you read the world through others' word design? Practice similar reading to non-designers of your studio-mates' designs.	Prints of students' projects, probes, big writing pad
Nov 5	Research phase in project 3 (at the graduate design studio): Engage low-tech materials in designing the words after reading their ancestors' worlds.	Recycled cans, wooden sticks, tapes, construction papers, transparent films, tapes, New Metaphor (Lockton et al. 2019), cardboard, and live objects in the graduate studio
Nov 12	<b>Intermediate review of project 3:</b> As students design the package as an alternative words of their ancestors' worlds, students experimented with user interactions with their studio-mates and their ancestors.	Giant paper, markers, sticky notes, and Liberatory Design toolkit (Anaissie et al., 2021)
Nov 14	A final critique of project 3: Students displayed their package design and reread the world of their ancestors through the Racism Untaught toolkit to pinpoint systemic oppressions.	Prints of students' projects, cardboards, tapes, Racism Untaught toolkit (Mercer and Moses, 2023), sticky notes, and markers
Nov 19	Brainstorm for design portfolios: Students gathered all their word designs in design education and industry so far, and analyzed their agency in designing the world-embedded words with low- and high-tech materials, with or without emphasis on aesthetic principles in design	Prints of the 100 principles of typography (Saltz, 2019), prints of students' projects, color markers, sticky notes, and newsprints
Dec 3	<b>Semester wrap-up (at the graduate design studio):</b> How can you design yourself and your world differently in the future design studios?	Whiteboards, markers, sticky notes, prints of students' progress, paints, paper rolls
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The low-tech materials employed in this course are tactile, metaphorical, and versatile, working as a suggestive language for students to share their lived world as resources for design projects. In Project 1: (Crisis) representation(see table 3, Aug 22 - Sep 10), they assisted students in expressing their daily struggles: moving away from home to pursue higher education; sustaining performance in both school and part-time jobs; and being asked to behave in certain ways due to binary perceptions on race, gender, and social class. These generative themes, as Freire suggests in critical pedagogy (Freire, 1996), resulted from careful reading and rereading of the world. As students read their worlds and named their existential situations, the first author paid attention to the common patterns from all students' world-encoded words.

Students were initially shy about sharing their worlds and struggles as they were accustomed to the absence of personal stories in banking education and industrial standards of design. Nevertheless, when they spoke their word, they found that their lived world was the shared world of design they were producing, encoded with similar struggles as students, young people, and young creatives in the professional fields. The materiality of low-tech materials created different kinds of user interactions, encouraging students to constantly explore different ways to describe their struggles. Both low-tech and high-tech materials were encouraged depending on students' familiarity with such design technologies. Some students thrived with tactile materials, while others leaned on compacted high-tech tools.

During the tactile explorations (Figure 6), dialogues and mutual interactions took place naturally, allowing constant sharing of different ways of reading and designing the world among moving design bodies in the shared space (Figure 6). Despite being unfamiliar with the low-tech materials in the graphic design process, students were reminded to patiently play with the materials in many ways and discover creative methods to speak and/or design their words. Unexpected aesthetics were produced during the interactions between students as design bodies and low-tech materials as design technologies and spaces. Students often searched for software tutorials to reproduce the aesthetic "words" efficiently, as seen in the world of design. While students focused on the digital screen to master their technical skills, they created a safe space to mimic the tutorial techniques in reproducing aesthetic words. In contrast, with low-tech materials organized on various shelves or tables in the design studios, students moved their bodies to explore the materials while exploring these spaces.

Through metaphorical toolkits (Table 3 and Figure 5), students shared how they read the world, a reading that was later encoded in their designs of their words. This is seen through the engagement of low-tech materials in the ideation and prototype phases as part of workshops in the design studio. As students transitioned from the research and low-tech sketching phase to the high-tech design process, the complexity of students' ideas was often simplified or even forgotten due to their unfamiliarity with the compacted design space in high-tech. Some students scratched out most of their design processes despite spending lots of time experimenting with both low- and high-tech materials, sharing that because the design concept (world) was "not interesting" or the design (word) looked "boring". When making such self-assessments, they denied their worlds and words based on the industrial aesthetics of the design world, manifested through studio-mates' attractive graphics, and, thus, felt demotivated to progress. These aesthetic reproduction biases normalized self-alienation and rejection, fostering the feeling of impostor syndrome. As we analyzed this process, we came to the conclusion that the pressure to conform to principles of design principles has limited students' explorations of new design technologies.



Figure 6: Physical toolkits that students used to re-read and re-design their worlds: Lego Serious Play (08/22/2024), visual analysis (09/10/2024), Beautiful Problems (10/01/2024), and New Metaphors (11/01/2024).

## Transforming the world in the typography design studio

In the world of design, graphic design workers are so alienated that they often see themselves as a part of a creative class standing above work exploitation, unsustainability, and other contradictions of capitalism. To deconstruct this worldview, the first author assigned a short Theater of the Oppressed play on the final critique of Project 2 (Table 3, Oct 29, and Figure 7). According to its systematizer, Augusto Boal, theater is a blunt mirror of lived worlds that enable people to speak their word while seeing themselves speaking that word and others hearing it, potentially rereading both word and world (2013). In this play, design students were supposed to hear what others thought of their designed words.

Students were divided into two groups: one group played the user role, who casually walked on the street and interacted with the posters in everyday life, while another group played the designer's role, documenting users' interactions in the play. In the first improvised play, the passengers referred to modern design principles to police the designers' choices of fonts, colors, and layouts. Only after the first author, the theater complicator (a.k.a. joker in Theater of the Oppressed), reminded of the "common sense" nature of the user's knowledge of design, did the passengers turn their attention to the messages of the poster. Then, the passengers moved through the posters quickly and commonly shared that they would not get involved in the social movements depicted by the posters as they were "not vibing" enough. In this case, the designer's words were read and comprehended by the users only when the designer's words aligned with the aesthetics of the user's words. When the design students took the modern aesthetics of the designed words for granted, they otherized the alternative aesthetics and chose not to engage with others' words and worlds.

In the next improvisation, the complicator encouraged students to play the salesperson role in promoting another student's design. The salespeople energetically talked through *the in-depth social contexts and their personal connections to the designer and their world*, implying that the rest of the class would sympathize with the design, too. While these salespeople were the same students who played the user roles, they read the design world and shared the sympathy with designers. The differences in both plays unveiled the importance of social contexts and modern aesthetics in encouraging interactions and attention in the modern world.





Figure 7: Notes in alternative aesthetics (left) were taken by half of the class when observing the users' interactions in the first improvisation. Then, all users gathered around the posters (design words) (right).

After recognizing students' sympathy for others, the first author held dialogues with the third author about historicity and ancestry. Based on these dialogues, Project 3: Package the Gap (Table 2) was crafted to recover the ancestors' worlds. By connecting to their ancestors, students recognized the aesthetics of the world that existed in the transition from the pre-modern to the modern, as witnessed by their ancestors. Human connections, compassion, resilience, patience, and genuineness have been undermined by the modern functional, colonial aesthetics in design. Although the world has changed since then, students were vividly inspired by their ancestors' designs, especially through the women in their families who persisted through hardships.

On the final delivery day of Project 3, students installed the design packages that represented their ancestors' worlds in the studio and used sticky notes to leave feedback on their peers' designs. Then, the Racism Untaught toolkit (Mercer and Moses, 2023) was introduced to reread their designed words based on the anti-racist, anti-sexist, and anti-ableist vocabulary included in its Elements Cards Deck. Students began a rich discussion on the meaning of these generative words right from the moment they started flipping through the deck (Figure 8). They selected the words that applied to their peer projects and stuck to the posters hung on the wall. Further discussions of the works followed suit. In this way, the theoretical concepts mentioned throughout the semester were included as conversation starters rather than being employed as a criterion on how well the student had applied them to their works.



Figure 8: The Racism Untaught toolkit cards generating a dialogue (left) and the cards stuck to the student poster projects (right).

When analyzing the student worlds brought to the studio (Figure 9-11), we came to the following conclusions. Their designs expressed mostly a concern with the American ontological designing (aptly criticized by Fry, 2020), including mass production and waste, labor exploitation, mental health issues, environmental destruction, as well as the monetization of communal values. While students struggled with the industrial design world, they are also expected to join the industry, sharpen their alienated labor, and make a living in this world. This contradiction did not surface in the Spring semester when we mainly focused on technical skills and aesthetic principles as a safe space for graphic design practices. The evolution from Spring to Fall revealed both the challenges and possibilities of implementing critical pedagogy in design education.



Figure 9: Project 1 exploratory mockups by a student who struggled with Polycystic Ovary Syndrome (PCOS) health condition, unfamiliar to the first author and other female students in the typography design studio. Through experimenting with low-tech materials such as newspapers and effects in Adobe Photoshop, she delivered overwhelming health information through chaotic motions.

Figure 10: Project 2 stop motion animation by a student concerned with

the politics of concert culture.

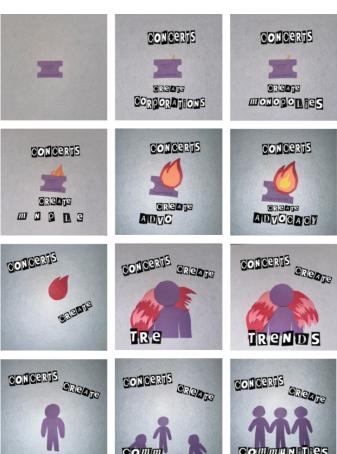




Figure 11: Project 3 memory card game for Gen Z (1997-2012) by a nostalgic student. Each card represents the design objects that were familiar during the childhood of mid-Gen Z, set against the thrift-style background.

#### Discussion

Similar to what Lee (2021) has found, critical pedagogy encouraged students—both graduate and undergraduate—to critically read and transform their worlds. Dialogue in the design studio (Lawrie, 2004) was foundational to this learning process, producing not only new knowledge about design but also developing students' ways of thinking.

Despite the aesthetic achievements, design students expressed their unfamiliarity, mixed feelings, as well as the eventual willingness to return to the banking style of education, in which students apply ready-made methods from the world of design to design words irreflectively. The pressure to master digital tools and meet industry standards overshadows opportunities for students' personal expression and developing critical consciousness. In this condition, students cannot simply ignore the "bubble of cruel optimism" (Matthews et al., 2023, p. 12) that promises post-graduate success in the Westernized, colonial, capitalist job market, provided they master the commercial design tools, which are nonetheless biased towards modern aesthetics.

Another discouraging factor at play here was the conservative political climate of Florida. The teaching assistant could only approach the influence of identity, cultural diversity, and race in type design as soon as it wasn't included in the general education offered by the university. Otherwise, such generative themes would not be allowed by the recent legislation on anti-DEI policies (2022). While no one asked to avoid them, we noticed hesitation and a lack of open discussions among students and faculty when discussing these themes. Still, the student work displays a high degree of critical consciousness on gender, class, and race relations. Although the design aesthetics may seem less appealing to the design industry, students now have more than one way to develop their competency.

The commitment to critical design pedagogy, thus, serves as a response to design students' unquestioned acceptance of industrial design practices. While the authors recognized that being design teachers means inheriting asymmetrical power dynamics with students, keeping an open channel for dialogue with students, making adjustments to the syllabus based on observation and feedback, and critically writing about this experience helps to mitigate the inherent biases of this positionality.

This research is a part of an insurgent design coalition of students, teachers, practitioners, and researchers trying to understand design practice in relation to geopolitics, cultural literacy, and behavioral complexity (Van Amstel et al., 2021). These coalitions are created temporarily to resist the eventual rise of systemic oppression, conservative politics, and/or fascism. Ultimately, this research calls for a fundamental reimagining of the discipline of typography and graphic design education in general, leaving room for alter/native languages, indigenous social design practices (van Amstel, 2023; Noel et al., 2023; Heilbronn, 2025) as well as emerging anticolonial aesthetics (Angelon & van Amstel, 2021). By moving towards that direction, the design of the world will be prioritized over the design of the word in graphic design education. In this way, the design of the word may play a different role: instead of delivering announcements, they can be mediators of a critical design of the world.

**Acknowledgments:** We would like to thank the graphic design students who agreed to share their learning process.

#### References

- Anaissie, T., Cary, V., Clifford, D., Malarkey, T. & Wise, S. (2021). Liberatory Design. http://www.liberatorydesign.com.
- Ambrose, G., & Harris, P. (2006). The fundamentals of typography. Ava Publishing.
- Angelon, Rafaela and Van Amstel, Frederick M.C. (2021). Monster aesthetics as an expression of decolonizing the design body. Art, Design & Communication in Higher Education, 20(1), pp. 83-102(20). https://doi.org/10.1386/adch 00031 1
- Barger, M., Roe, E., Gilbert, R., Jenkins, B., & Hoff, A. (2006, June). Made In Florida: A Stem Career Outreach Campaign. In 2006 Annual Conference & Exposition (pp. 11-906).
- Bow, L. (2019). Racist cute: Caricature, kawaii-style, and the Asian thing. American Quarterly, 71(1), 29-58.
- Boyd, A., & Mitchell, D. O. (Eds.). (2013). Beautiful trouble: A toolbox for revolution (pocket edition). Or Books.
- Boal, A. (2013). The rainbow of desire: The Boal method of theatre and therapy. Routledge.
- Chen, L. L., Djajadiningrat, T., Feijs, L., Fraser, S., Kyffin, S., & Steffen, D. (2013). Design and semantics of form and movement. Proceedings of DeSForM.
- Lockton, D., Singh, D., Sabnis, S., Chou, M., Foley, S., & Pantoja, A. (2019, June). New metaphors: A workshop method for generating ideas and reframing problems in design and beyond. In Proceedings of the 2019 Conference on Creativity and Cognition (pp. 319-332).
- Dos Santos, W.B., Mazzarotto, M., and Van Amstel, F.(2023) Learning design as a human right: the beginnings of a design lab founded on critical pedagogy, in Derek Jones, Naz Borekci, Violeta Clemente, James Corazzo, Nicole Lotz, Liv Merete Nielsen, Lesley-Ann Noel (eds.), The 7th International Conference for Design Education Researchers, 29 November 1 December 2023, London, United Kingdom. https://doi.org/10.21606/drslxd.2024.104
- Elrabbaei, I. (2018). Creativity spaces in graphic design: Pedagogical implications. International Journal of English and Education, 7(4), 337-348.
- Freire, P. (1983). The importance of the act of reading. Journal of Education, 165(1), 5-11.
- Freire, P. (1996). Pedagogy of the oppressed (revised). New York: Continuum, 356, 357-358.
- Freire, P., & Macedo, D. (2005). Literacy: Reading the word and the world. Routledge.
- Fry, T. (2020). Defuturing: A new design philosophy. Bloomsbury.
- Fonseca Braga, M., M. C. van Amstel, F., and Perez, D. (2024) Social Design at the Brink: Hopes and Fears., in Gray, C., Hekkert, P., Forlano, L., Ciuccarelli, P. (eds.), DRS2024: Boston, 23–28 June, Boston, USA. https://doi.org/10.21606/drs.2024.1538
- Griffin, D. (2016). The Role of Visible Language in Building and Critiquing a Canon of Graphic Design History. Visible language, 50(3).
- Heilbronn, R. (2025). What does it mean to decolonise the curriculum: is it possible? Ethics and Education, 20(1), 63–76. https://doi.org/10.1080/17449642.2025.2460382
- hooks, b. (2014). Teaching to transgress. Routledge.
- Jordan, B., & Henderson, A. (1995). Interaction analysis: Foundations and practice. Journal of the Learning Sciences, 4(1), 39–103. https://doi.org/10.1207/s15327809jls0401 2
- Jalali, A. Londoño Davalos, L. Van Amstel, F. M. C. (2025) Now we know: Findings from a critical pedagogy experiment on the nature of codesign knowledge, in The 8th International Conference for Design Education Researchers, 22-24 September, 2025, Aveiro, Portugal.
- Kymlicka, W. (2013). Neoliberal multiculturalism. Social resilience in the neoliberal era, 99-125.
- Laranjo, F. M. (2017). Design as criticism: methods for a critical graphic design practice (Doctoral dissertation, University of the Arts London).
- Lawrie, S. (2004). We have a lot to talk about: dialogue journals in graphic design education. Art, Design & Communication in Higher Education, 3(2), 81-88.
- Lee, C. (2021). Centering the document—Towards a critical studio pedagogy in graphic design. Journal of Applied Learning and Teaching, 4(Sp. Iss. 1), 50-59.
- Lurz, R. (2018). Perceptions of STEM and Liberal Arts Policy in Florida (Doctoral dissertation, University of Pittsburgh).
- Mandel, L. (1993). Developing an awareness of typographics letterforms. Electronic publishing, 6(1), 3-22.
- Matthews, B., Shannon, B., & Roxburgh, M. (2023). Destroy All Humans: The Dematerialisation of the Designer in an Age of Automation and its Impact on Graphic Design—A Literature Review. International Journal of Art & Design Education, 42(3), 367-383.

- Mazzarotto, M., and Serpa, B.O. (2022) (anti)dialogical reflection cards: Politicizing design education through Paulo Freire's critical pedagogy, in Lockton, D., Lenzi, S., Hekkert, P., Oak, A., Sádaba, J., Lloyd, P. (eds.), DRS2022: Bilbao, 25 June 3 July, Bilbao, Spain. <a href="https://doi.org/10.21606/drs.2022.710">https://doi.org/10.21606/drs.2022.710</a>
- Mazzarotto. M., Van Amstel. F. M. C., Serpa, B. O., Silva, S. B. (2023). Prospecting anti-colonial qualities in Design Education. V!RUS Journal, 26, 135-143. Translated from Portuguese by Giovana Blitzkow Scucato dos Santos. <a href="http://vnomads.eastus.cloudapp.azure.com/ois/index.php/virus/article/view/833">http://vnomads.eastus.cloudapp.azure.com/ois/index.php/virus/article/view/833</a>
- Mazzarotto, M. (2024). Paulo Freire's critical pedagogy contributions to emancipatory design: From cultural invasion towards cultural synthesis. Base Diseño E Innovación, 8(9), 11–22. https://doi.org/10.52611/bdi.num9.2023.973
- McCarthy, S., & De Almeida, C. M. (2002). Self-authored graphic design: A strategy for integrative studies. Journal of Aesthetic Education, 36(3), 103-116.
- Melamed, J. (2006). The spirit of neoliberalism: From racial liberalism to neoliberal multiculturalism. Social text, 24(4), 1-24.
- Mercer, L. E., & Moses, T. (2023). Racism Untaught: Revealing and Unlearning Racialized Design. MIT Press.
- Noel, L. A., Ruiz, A., van Amstel, F. M., Udoewa, V., Verma, N., Botchway, N. K., ... & Agrawal, S. (2023). Pluriversal futures for design education. She Ji: The Journal of Design, Economics, and Innovation, 9(2), 179-196.
- Papanek, V.(1985). Design for the real world: Human Ecology and Social Change. Academy Chicago
- Ponce-Camacho, M. A., & Lopez-Leyva, J. A. (2023). Lego® Serious Play®: Design Thinking as a Tool to Teach the Value Proposition Concept to Promote the Regional Development of Creative Industries. In Sustainable Growth Strategies for Entrepreneurial Venture Tourism and Regional Development (pp. 93-106). IGI Global.
- Rosner, T. L. (2014). An Analysis of Traditional Graphic Design and MultiCommunication Arts Pedagogy. GSTF Journal on Media & Communications (JMC), 2, 1-7.
- Saito, C., Freese Gonzatto, R., and van Amstel, F. (2024) Anticolonial prospects for overcoming the coloniality of making in design, in Gray, C., Hekkert, P., Forlano, L., Ciuccarelli, P. (eds.), DRS2024: Boston, 23–28 June, Boston, USA. https://doi.org/10.21606/drs.2024.255
- Saltz, I. (2009). Typography essentials: 100 design principles for working with type. Rockport Publishers. Sanabria, Flory. (2024). Meaningful Connections: Awareness, Belonging, and Community in Latinas with ADHD...
- 10.13140/RG.2.2.34771.39200.
  Serpa, B.O., van Amstel, F.M., Mazzarotto, M., Carvalho, R.A., Gonzatto, R.F., Batista e Silva, S., and da Silva Menezes, Y. (2022) Weaving design as a practice of freedom: Critical pedagogy in an insurgent network,
- in Lockton, D., Lenzi, S., Hekkert, P., Oak, A., Sádaba, J., Lloyd, P. (eds.), DRS2022: Bilbao, 25 June 3 July, Bilbao, Spain. <a href="https://doi.org/10.21606/drs.2022.707">https://doi.org/10.21606/drs.2022.707</a>
  Gunn, S.(2018) BODY MAPPING for ADVOCACY: A Toolkit. The International Coalition of Sites of Conscience,
- https://www.sitesofconscience.org/wp-content/uploads/2023/06/Toolkit-Body-Mapping-2018 Online.p
- Turgut, O. P. (2017). Expressive typography as a visualisation of ideas. New Trends and Issues Proceedings on Humanities and Social Sciences, 4(11), 164-170.
- Varsha, V. (2023). Critical Race Theory: Framework and the Recent Ban in the United States. , No. 1 Int'l JL Mgmt. & Human., 6, 1477.
- Van Amstel, F. M. C. (2023). Decolonizing design research. In The Routledge companion to design research (pp. 64-74). Routledge.
- Van Amstel, F., Sâmia, B., Serpa, B.O., Marco, M., Carvalho, R.A., and Gonzatto, R.F.(2021) Insurgent Design Coalitions: The history of the Design & Oppression network, in Leitão, R.M., Men, I., Noel, L-A., Lima, J., Meninato, T. (eds.), Pivot 2021: Dismantling/Reassembling, 22-23 July, Toronto, Canada. <a href="https://doi.org/10.21606/pluriversal.2021.0018">https://doi.org/10.21606/pluriversal.2021.0018</a>
- Watson, L. M. (2023). The Anti-" Critical Race Theory" Campaign-Classroom Censorship and Racial Backlash by Another Name. Harv. CR-CLL Rev., 58, 487.
- Wood, L., & Haylock, B. (Eds.). (2020). One and many mirrors: perspectives on graphic design education. Occasional Papers and The Physics Room.

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