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+2018

With special thanks to _____
David Henshall
Aled Singleton
George Lovesmith
& all Llyfrgell Maindee Library+ volunteers.

booklet graphics Eve Bembo.

Vertical Studio 2018 - adHACK+

Objective

to work directly with local user groups to hack/ appraise/ customise/ re-purpose a dysfunctional library shelving system.

Context

llyfrgell Maindee library+ : a volunteer-led library & all-round community hub located in Maindee, Newport. closed in the summer of 2015 by the city council, the library was re-opened later in the same year and is now run entirely by volunteers from local charity Maindee Unlimited.



Regeneration

work to refresh the fabric of the library began in 2017 and has culminated in the conception of this WSoA vertical studio project. architects George Lovesmith (of Integrated Workshop) and Sarah Hollingworth (of Architecture 00) were commissioned to redesign the library's interior - the task of 6 WSoA students (guided by design engineer David Henshall) is to attempt the same on the library's shelving system.

Resources



www.maindee.org/blog

Instagram @maindeelibrary



Existing the community library currently employs the use of several 20+ years-old metal shelving units. standing at around 1.6m tall, the units feature flexible individual shelf heights, mobility wheels & space-age elliptical book ends.

Aches & Pains

the shelves also unfortunately wreak havoc upon their literary residents. some of the complaints noted during the community co-authorship process:

INFLEXIBILITY & UNSUITABILITY

(shelves are too deep for smaller books but too shallow for larger books)

(book ends are too short, allowing books to tip over the edges of the shelves)

(fixed shelf width means that smaller book collections are allowed to slide & fall sideways)

LACK OF INTEGRATED STORAGE

(volunteers bereft of safe spaces to store belongings throughout the day, occasionally resulting in theft)

(messier equipment, ie childrens' art supplies, kept out in the open and used a little too freely)

HARSH TACTILITY

(dark-hued metal is visually & physically unforgiving & is very heavy)



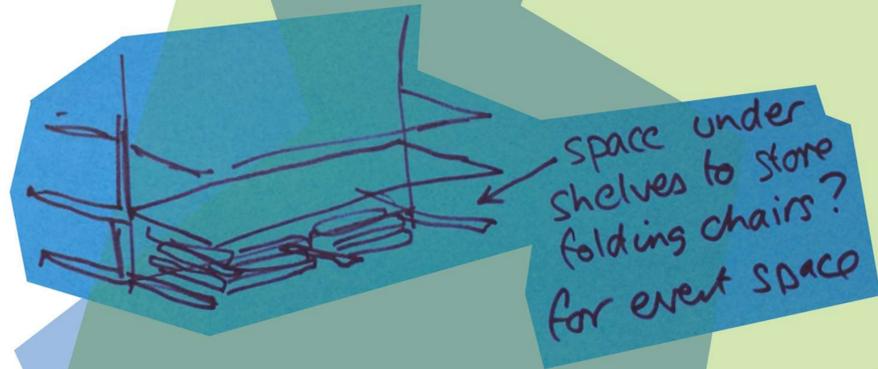
First responses

two local community co-authorship sessions were held at Maindee Library over the course of the project's first week. included amongst attendees were several of the library's volunteers/ architect George Lovesmith/ the 6 WSoA students/ filmmaker Fez Miah/ 'Finding Maindee' project manager Aled Singleton/ & others. over the course of the meetings, needs & hopes for the shelving overhaul were discussed & sketched by students and community members alike.



Cutting & Sticking

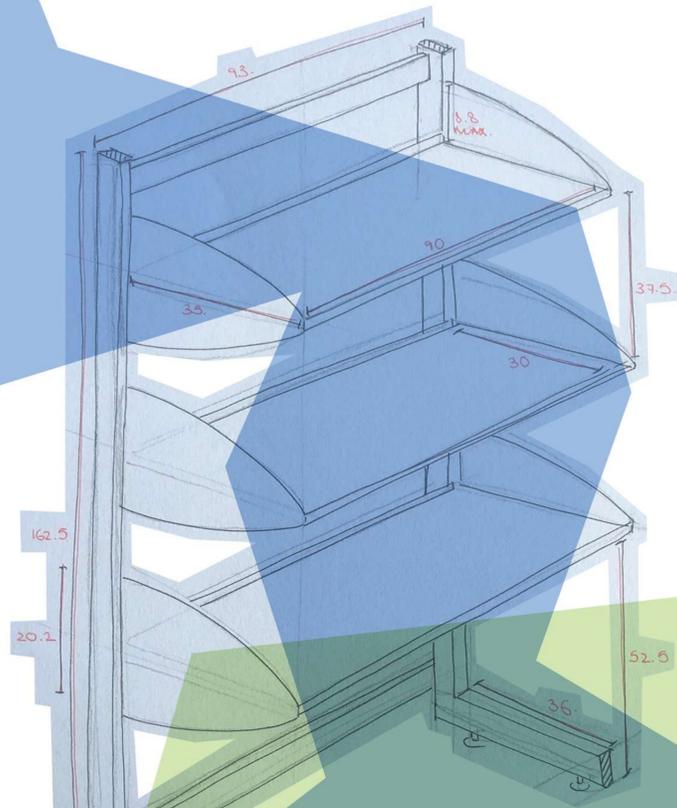
as a result of these discussions, ample content was generated & a plethora of ideas were conceived - primarily those that looked to solve issues documented in the 'Aches & Pains' section of this booklet. however some of these concepts (especially those concerning shelf plans incorporating laptop bays/ standing work stations/ childrens book collections) were subsequently discarded due to possible irrelevance to the studio project within the short time frame.



Conclusions

it was resolved that the shelving changes should address primarily the need for storage for volunteer belongings & library materials/ shelf end inhabitation/ front-facing book displays/ maintaining easy shelf height adjustment/ possibility for public display spaces.

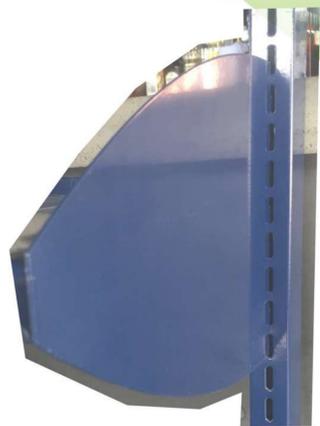
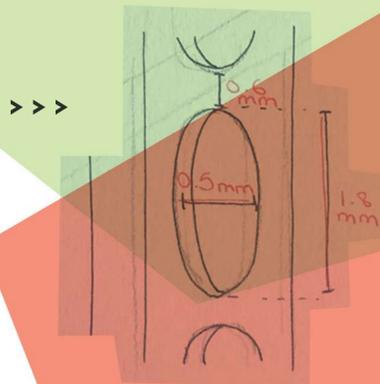




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HACK-ing
as per the studio's focus on hacking culture, the decision was made to maintain the basic framework of the shelf structure & modifying it to fit the desires of the library community as previously discussed. the WSoA 6 took complete measurements of the existing system (erectable as one unit [pictured] or as a double-width shelf, which was to be taken into account during the design process).

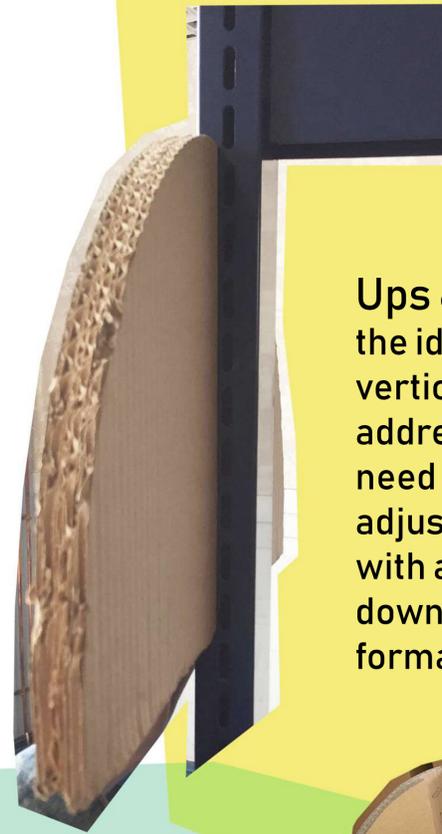


ad-ing
following decisions made on additional functions to be fulfilled by any proposed modifications, 6mm cardboard was used as a prototyping material to begin modelling & ad-hoc-ing ideas for improvements.

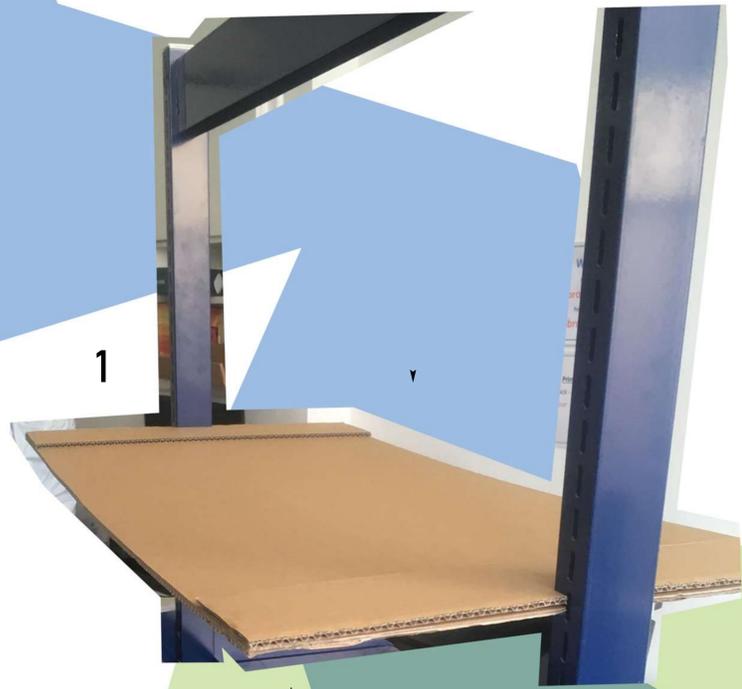


Ups & Downs

the idea developed to create a vertically sliding unit, addressing simultaneously the need for shelf end inhabitation, display space & height adjustability. attaching semi-circular ends to then framework with a vertical trench allows the form to travel freely up and down the structure - work was then started on a joinery format that would allow for two ends to be connected to each other by shelving elements.

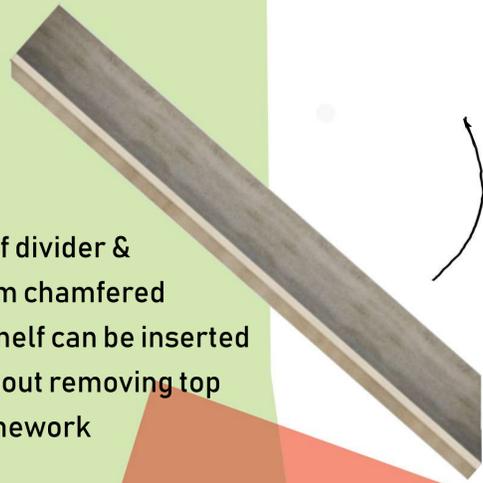


Assembly
maintaining the modular approach,
the shelves could be assembled
& disassembled comparably quickly.



1

shelf divider &
beam chamfered
so shelf can be inserted
without removing top
framework



slot shelf element
into framework

push end element onto
shelf edges

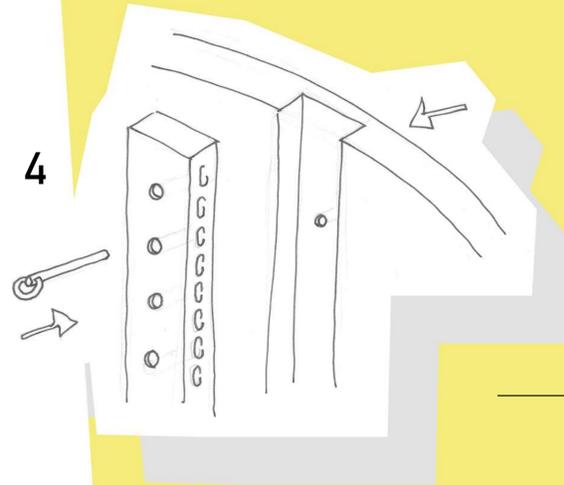


3

attach opposite
shelf end in same way



2

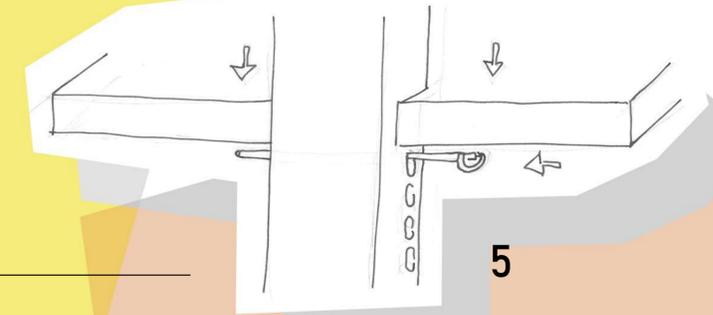


4

push lynch pins
underneath shelf
into existing
perforations to
prevent vertical movement



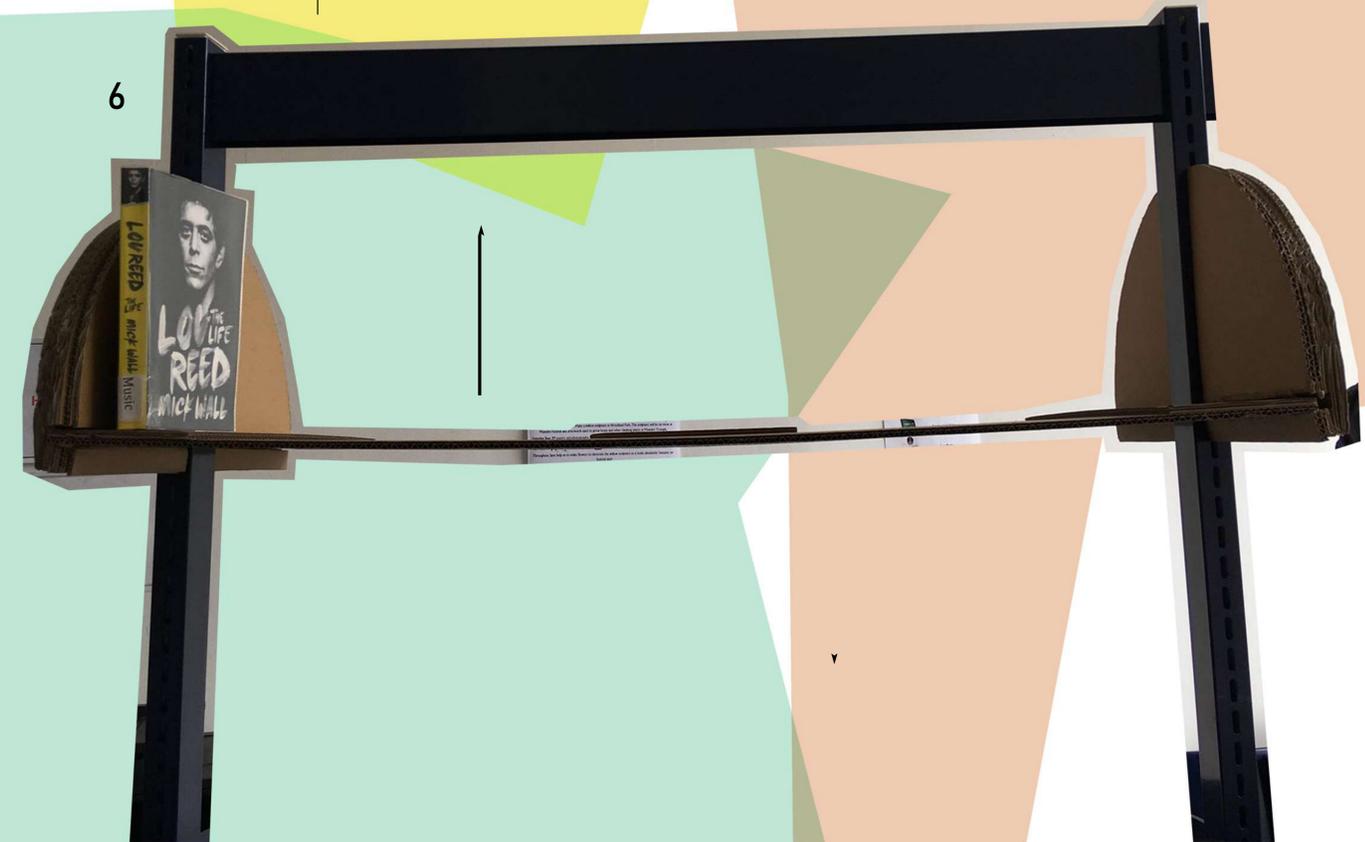
push lynch pins
through holes punched
into framework &
ends to secure



5

load with books*

note: tensile issues later solved by addition of a perpendicular
beam running beneath the shelf*

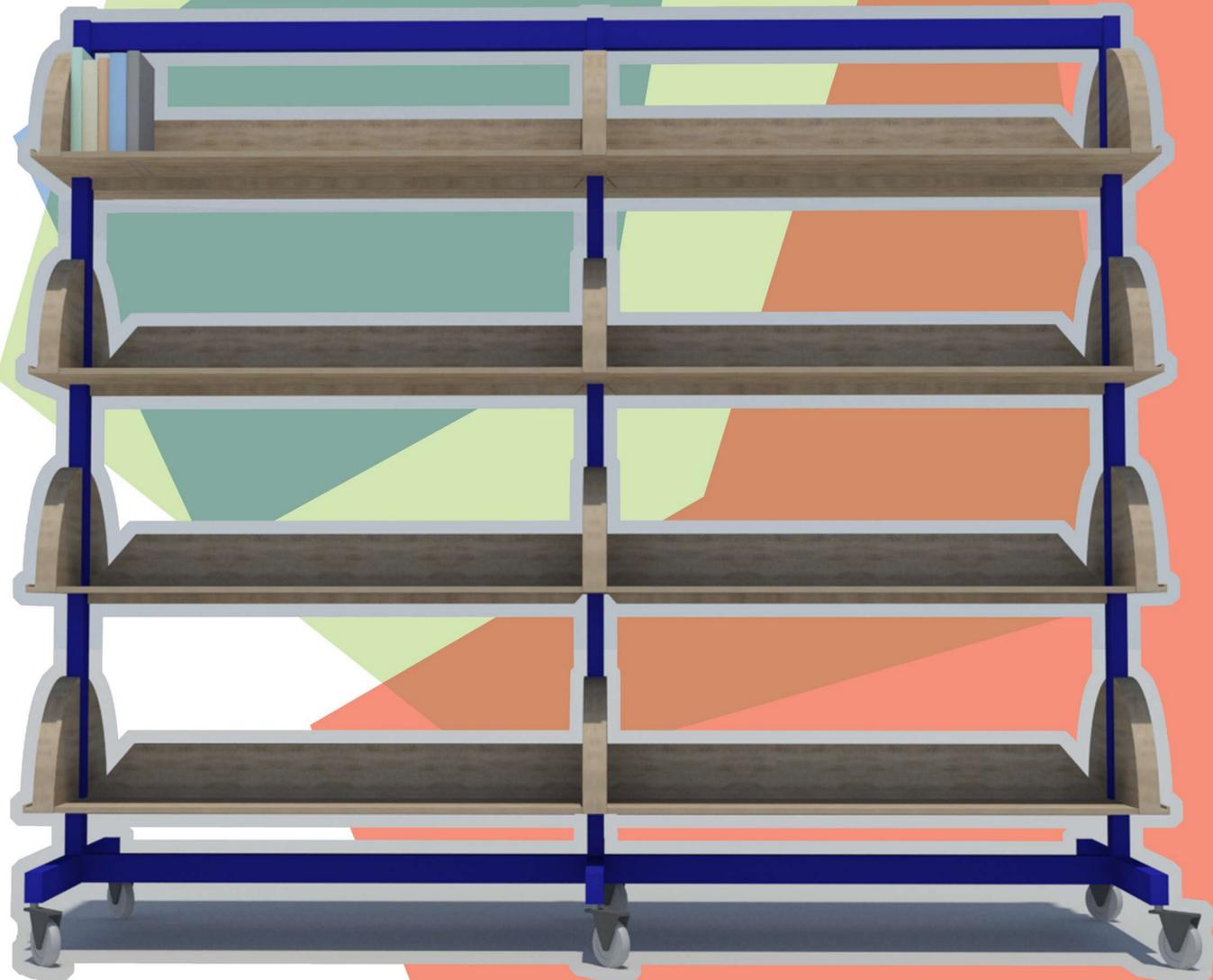


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Culmination

the resulting pays reference to the existing in many ways, evident in these imagined products; though the WSoA 6 hope that their efforts to meet the hopes of Llyfrgell Maindee Library+ have been worthwhile. as is the aim of hacking culture, the point of such projects is not to create something new entirely; but to innoate with a little help & inspiration from what is already here.



ADAM MOSTAFA - AMRIT UBHA - EVE BEMBO



HANNAH PRICE - LUCY MCNAMARA - ROBYN WESTWELL.