VEGETARIAN VAMPIRES: WHY THE CALL TECHNOLOGY PROVIDER DOESN'T HAVE TO SUCK THE TEACHER'S BLOOD

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Abstract

Academics hunt for data the way vampires look for blood. It keeps them alive, but it means, just like vampires, that they leave behind a path strewn with victims. Furthermore, their insatiable requirements for data frequently leave them unable or unwilling to create fair, ethical relationships with others. In this paper, we focus on the relationship between CALL technology providers and language teachers. Typically, academics in the area of CALL technology require the support of language teachers to enable what they are doing. The academics get feedback and data. The teachers, in contrast, will in most cases have little to show for their cooperation but a distraction and interruption from the normal flow of their teaching and a vague feeling that they may have contributed to 'progress'. We examine the causes of this situation from practical and philosophical perspectives, then consider the specific case of our own group: how we have behaved less than ethically in the past, and what we can do to try and behave more ethically in the future.

Keywords: CALL, ethics, moral philosophy, open source.

1 INTRODUCTION

Academics hunt for data the way vampires look for blood. It keeps them alive, but it means, just like vampires, that they leave behind a path strewn with victims. Furthermore, their insatiable requirements for data frequently leave them unable or unwilling to create fair, ethical relationships with others. In this paper, we focus on the relationship between Computer Assisted Language Learning (CALL) technology providers and language teachers. Typically, academics in the area of CALL technology require the support of language teachers to enable what they are doing. The academics get feedback and data. The teachers, in contrast, will in most cases have little to show for their cooperation but a distraction and interruption from the normal flow of their teaching and vague feeling that they may have contributed to 'progress'. The most frequent conclusion is that the academic project stops for lack of funding or because it was never to be more than an 'experiment'. Teachers are left stranded if they were naïve enough to use the technology offered them. It is no wonder that language teachers shy away from academic projects. The relationship is far from symbiotic.

The rest of the paper is organised as follows. We start in §2 by examining the causes of this situation from a sociological perspective, looking both at examples of projects where we argue that technology providers have abused the trust of teachers and at the pressures which encourage them to do so. In §3, we analyse the ethics of this type of relationship using the 'Concern, Respect, Cooperation' framework of Garrett Cullity, and attempt to provide a more formal justification of our claims concerning the moral demands placed on educational technology providers. In §4, we move on to consider the case of our own group, critically examining ethical shortcomings in previous projects and outlining how we are trying to make our current main project, the learning-by-reading platform LARA, more ethically defensible. §5 continues by outlining our future plans. The final section concludes.

2 CALL TECHNOLOGY PROVIDERS AND TEACHERS: A TOXIC RELATIONSHIP

Ethics has been the buzzword of software development, online platforms and the like for several years. The ethics encompassed in CSR – Corporate Social Responsibility – inform how businesses

should behave. From this came USI – University Social Responsibility [1]. The EU has RRI – Responsible Research and Innovation – a track of Horizon 2020 which has reached beyond Europe[1].

A major concern for USR and RRI is the tension that exists between the researcher's obligations both to produce 'research' at a university level and to do so in an ethical way. The area itself is vast – as is evidenced by the fact that it's figured significantly in Horizon 2020. In this paper, we focus on one small aspect of it: the relationship between the academic researcher and the teacher, in particular at school level. How should one value results compared with methodology? It is fair to say that notions such as the ends justifying the means belong to a past which has no relationship to the present. We expect better of research now, whether it be using animals for testing…or language teachers and their classes. And, by the way, we are not suggesting that researchers have not been ethical in the past, but that the standards for ethical behaviour are different now.

2.1 Significant examples of teachers getting burnt by platforms

We have written elsewhere [2,3] of Wikispaces, the platform which made various grand statements about how particularly important ethics were in relation to educational use and then disastrously (for the user) collapsed. It is by no means an exception. Many teachers world-wide are trapped in an uneasy relationship with internet technology where committing to a platform is an uncertain business often ending unhappily. Other major examples including Storify and Posterous.

Storify was a platform promoted and used by educators around the world[2]. Once it was sold to Adobe, it became a minor part of the Adobe stable of products and financially was out of reach for teachers. Meanwhile the search for an alternative began[3] [4] [5] [6]. Posterous was similarly promoted. ETEC 510, for example, 'a course examining research and related exemplary participatory, networked media tools,' gave it a glowing recommendation thus[7]:

> Posterous can be used as a powerful tool in the classroom….Educators need to play an active role in defining and creating (forging) the tools and applications that define the relationship between media and learning. Anderson (2008) stresses the need for meaningful online interactions that support learners through a variety of strategies. Four attributes of learning that are highlighted are: learner-centred, knowledge-centred, assessment-centred and community-centred.

> Posterous is an online learning system that helps to exemplify these attributes through the creation of diverse and distributed interactions.

And it goes on to detail just how Posterous does this. Or rather, did. For other examples of the promotion of Posterous to teachers, in 2011 the Chronicle of Higher Education published a piece promoting Prosterous as a learning environment[8].

> My goal is to use Posterous to fully replace a learning management system because I can create (as I'm sure most teachers can) a better and more engaging learning space using Posterous than any current learning management system can provide to students and instructors.

Ko and Rossen's widely cited *Teaching Online: A Practical Guide* was equally fulsome in its praises ([4], p. 263), as was Pacansky-Brock's *Best Practices for Teaching with Emerging Technologies* ([5], p. 138). One teacher even said it was so good he'd pay to use it[9].

In February 2012, Posterous stated, in reply to a query as to whether it was a good idea to migrate to the platform, that it 'had absolutely no plans to sell'. Good news for teachers who require stability.

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[1] https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innovation

[2] https://www.theverge.com/2017/12/12/16767880/storify-shut-down-2-livefyre

[3] https://www.chronicle.com/blogs/profhacker/alternatives-to-storify-revisited/63731

[4] https://news.wtm.com/storify-is-dead-long-live-any-decent-alternative/

[5] https://www.niemanlab.org/2017/12/storifys-demise-shows-nothing-lasts-forever-but-the-use-of-social-media-embeds-in-stories-persists

[6] https://www.sutori.com/blog/a-real-alternative-to-storify

[7] https://met.ubc.ca/courses/etec-510/

[8] https://www.chronicle.com/blogs/profhacker/rebelling-against-blackboard-with-posterous-and-tinychat/36145

[9] https://www.teachingquality.org/tool-review-posterous-spaces/

Nineteen days after this statement Posterous's owners sold to Twitter. It soon became clear that Twitter was not interested in Posterous, but had only bought it in order to acquire its engineers, and so the writing was on the wall. In 2013 it closed down after offering onerous ways of migrating, one post at a time. Edublogs was one of the many which tried to facilitate the migration with better tools[10].

It is key to understanding how difficult these situations are for teachers that every time a platform closes down they lose not only the way in which they taught, perhaps even the material they used to teach, but they lose a community. That's the unvalued but infinitely precious aspect of these ongoing disasters for teachers.

2.2 Can academics do better than for-profit ventures? The background

These platforms were not academic creations. Does that mean university created apps and platforms would do better? Are there reasons for thinking they would create better conditions for users? Unfortunately, the answer would seem to be negative.

In the first place, universities around the world are being compromised by the process of turning higher education into business. The impact on universities and their staff and students in the UK has been catastrophic. The student as customer is an impossible situation where marks must continue to go up and where students have rights to marks based on their having paid for them – not in a secret, corrupt way, but as a business transaction[11]. According to an OECD study '… one in five graduates in England could not handle literacy tasks more complicated than understanding the instructions on a packet of aspirin, while the numeracy level of 28 per cent was limited to estimating the fuel left on a petrol gauge'[12]. The startling thing is that when a major survey was done in 2014/5 as to graduate experience of corruption across the EU and the UK, the UK came off best[13]. Perhaps the implication is that corruption, as is commonplace in a lot of the universities from which data was taken, is not necessary in the UK as the desired consequences of corruption have been sanitized.

At any rate, whilst the university in the EU is not run as a business in quite the way that British universities are, nonetheless we note that the EU's research flagship Horizon 2020, costing some 80B euros, is described thus on their site[14]:

> 'Horizon 2020 is the financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness.

> Seen as a means to drive economic growth and create jobs… The goal is to ensure Europe produces world-class science, removes barriers to innovation and makes it easier for the public and private sectors to work together in delivering innovation.

> Horizon 2020…reduces red tape and time so participants can focus on what is really important. This approach makes sure new projects get off the ground quickly – and achieve results faster.'

It talks of a 'single **market** for knowledge, research and innovation.' [our bold] Supported and financed by the EU are other major organisations like Design Think[15] and its parent, the European Foundation for Management Development[16]. The EFMD is a massive body which 'firmly believes in bringing companies and academic institutions together and work towards facilitating and strengthening exchanges between the two.'

There is a stress throughout on economics, making money, about making business closer to education, about speeding things up to get quick results. University research is inextricably linked with profit making and speed. This cannot but put untoward pressure on the very notion of research and those undertaking it, however one attempts to attach a layer of ethics to it.

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[10] https://edublogs.org/2013/02/19/migrating-your-posterous-site-to-edublogs/

[11] *The New Statesman* August 2019 "The great university con: how the British degree lost its value". https://www.newstatesman.com/politics/education/2019/08/great-university-con-how-british-degree-lost-its-value

[12] *ibid*

[13] http://etico.iiep.unesco.org/es/not-usual-suspects-largest-survey-eu-academic-corruption

[14] https://ec.europa.eu/programmes/horizon2020/en/what-horizon-2020

[15] http://www.d-think.eu/

[16] https://efmdglobal.org/about-efmd-global/

The ambiguities and moral issues are obvious again from looking at Horizon 2020. To take an example, at the same time as it was promoting ethically dubious practices, most obviously the approval and sanitization of 'gamification' in education [6], it had an ethical track (RRI) alongside it and in principle informing it[17].

To this mix of ethical conundrums, we now add the aspect of data-collection. We are all so inextricably involved in the process of data-collection at all levels, governmental, commercial, and social, that we take it for granted as the basis for how we live in the internet-connected world. It is this fundamental need for data – the life-blood of academic 'research' – that gives us the picture we started with of the researcher as vampire insatiably extracting blood in the form of numbers from its victims. To take the vampire metaphor a step further, historically it is fair to say the imperative of data acquisition has been not only insatiable but also, unsurprisingly, unethical.

Where does a university CALL group developing an app to help language learning through reading sit in all this? The collection of data for language learning is seen as important for understanding how both teaching and technology should develop, and presumed to be benign. Yet the academic researcher's idea of 'benign' and the teacher's may be quite different. For a start, the research group is in a bind. In order to get the teacher to use the technology, the group has to demonstrate that it will be useful. That means getting data. In turn, that means getting teachers to use the technology in order to demonstrate that the technology is useful. This is far from being a benign process for the teacher.

2.3 Enter the teacher: stooge or partner of the researcher?

Due to the RRI track of Horizon 2020, there is a lot of data available to do with teaching, research and ethics.

Carlo Perrotta [7] directly received feedback from teachers at school level and we starkly see their dilemmas. We look in detail at what teachers have to say in his report, because they so rarely get a voice. (Indeed, an Australian report on RRI observes that the Department of Education was not a party to the meetings.) Perrotta comments that 'Innovation was construed as an ill-defined collection of creative and "funky" practices at the margins of rational, mainstream education. Not necessarily something "taking the school forward by all conventional measures" or "helping students get the best results". Nonetheless a necessary "irritant in the system" which in some cases can help students "have a more memorable experience" despite requiring "lots of effort"'

He quotes "Sue": 'you need to keep asking yourself: "what for?" Is it (technology) a better way of doing things, or just an expensive way of doing something very simple? Is it a worthwhile activity or not – you need to keep asking yourself "what for?"'

He continues that 'Teachers believed that their success was dependent on a set of external factors and criteria which were not always compatible with innovative practices', "Robert" commenting: '"my success is going to be judged by exam results – by parental choice – what parent want, what children want isn't necessarily what I would describe as innovative practice. What I cannot do is be funky and interesting and let my results slip – I just don't have that freedom."'

Again we see business coming into the equation: complementing its infiltration at higher education level, it is now looking at school-children and the money available to educate them.

> And yet, they agreed that their time and dedication as innovators was going to eventually pay off, yielding benefits which were not strictly "educational", but about the school's image as an innovative, future-facing organisation connected to the world of aspirational high-tech business. Several English teachers were actively involved with the school leadership in mediating relationships with major technology companies; this was described as a sign that the school was successful and capable of establishing "links with businesses". These links were also seen as crucial for the procurement of expensive equipment and software licences, and for accessing networks of information and support.

As interviewee "Mark" puts it: '"ICT is a black hole, with very short product cycles, the costs of licences and upgrades are also prohibitive."'

The bottom line is that they can't afford to fail as teachers. "Michael": '"it's very clear that we are given freedom insofar as we can demonstrate that we can improve standards."'

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[17] https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innovation

Now we are back to data and the use of the teachers to get the data to prove to the teachers that your pet app works.

It is important to appreciate that teachers are not luddites or negative in principle. For example, Perrotta notes explicit appreciation that technology may even be vital. He quotes "Franz", an Austrian, talking about the massive social change taking place in Germany as a result of the influx of children coming to school with no German language. He sees technology as a positive.

But teachers are burned over and over.

Another EU project was iTEC. You can see the official presentation of this project to bring technology to the classroom at its home page[18]. However, Perrotta goes on to say,

> As a project, iTEC struggled to produce actual technological resources and applications in spite of its original mandate, and resorted halfway through to focus on the whole gamut of "the Internet" and its endless, free supply of "affordances": openness, learning, collaboration, entrepreneurship, and knowledge. At the same time, "app" became a catch-all term referring to a broad set of free digital resources which could support "web 2.0 learning" in generic pedagogic scenarios….

Interviewee "Romea" reflected on the distress of having to deal with the failings of the technology and the need for great personal investment in terms of time and effort:

> "… it was a lot of work outside teaching and it took a lot of my private time. It required a lot of effort. We didn't always have the equipment, if you remember we had the TeamUp software and other 2.0 applications which didn't work in many cases – a lot of learning! The IT teachers at my school didn't help either – they didn't teach students how to use these tools. They didn't know there are tools like these which exist in practice.''

3   A FORMAL ANALYSIS IN THE FRAMEWORK OF GARRETT CULLITY

In this section, we will sketch out a more formal treatment of the issues we described above. In particular, we will attempt to give more justification for the intuitive claim that many suppliers of academic CALL software are acting unethically, and obtain a more precise idea of what conditions might need to be met in order for their actions to be considered ethical. We will use the framework developed in Garrett Cullity's recent book *Concern, Respect and Cooperation* [8], since it is a good fit to the issues we are considering here. In order to make the exposition self-contained, we start by giving a brief summary of Cullity's basic principles.

As the title suggests, Cullity argues that there are three separate bases to morality, which interact to cause the moral complexity and confusion we see all around us. In a nice phrase, he defines morality as being "the part of our flourishing that consists in being unselfishly related to others", and the three bases come from what he sees as the three fundamentally different ways in which we can think about ourselves and other people. We can be *patients*, beings that things happen to; "concern" is the principle that we would prefer good things to happen to people. We can be *agents*, beings that do things; "respect" is the principle that we should not interfere with other people's autonomy. Finally, we can be *partners*, beings that do things together as part of some larger enterprise; "cooperation" is the principle that we should react positively to joint enterprises that are good, and negatively to ones that are bad.

Obviously, all three fundamental principles have to be read as "other things being equal". In fact, other things are never equal, since the principles always conflict with each other to some extent. Autonomy implies the risk that bad things will happen to you; if you choose freely, sometimes you will make bad choices. Being part of any cooperative enterprise means that you accept the rules of that enterprise, which makes you less free. Cullity pays a good deal of attention to what he refers to as higher-order concepts. For example, given that we accept autonomy to be good, it follows that it is good to pursue a course of action that gives other people more autonomy.

An important concept in Cullity's framework is what he calls "content-undermining". Making people feel less pain is in general good according to the principle of concern. Other things being equal, it's good to

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[18] http://itec.eun.org/web/guest/home

help someone get rid of a persistent mild headache. But although cutting off their head achieves this end, it is not good, since we have made it impossible to achieve the more fundamental goal of increasing their well-being. Another concept, of equal importance, is "context-undermining". In social contexts, we are always bound by the agreements we have made with the various cooperative enterprises in which we are involved. Although it would be good for the bank teller to buy her family a better house, it isn't good for her to do this by taking money from the vault, since she has voluntarily assumed a role where she undertakes to act professionally with respect to the bank's finances, limiting her autonomy in exchange for the benefit of receiving a salary.

With this introduction concluded, let us return to the main topic of the paper and think about the academic CALL system provider who is trying to persuade the language teacher to use their software. We consider two questions: (a) whether it is moral for the teacher to accept the offer, and (b) whether it is moral for the system provider to make it. We start with (a).

The teacher may plausibly reason as follows. Her professional obligation is to try to help her students learn the language they are studying. This is not, however, an open-ended commitment, and in practice her time is a strictly limited resource which she must try to dispose of as well as she can. If she agrees that she will encourage her students to use the CALL system, several outcomes may occur. If it is immediately clear that the system works badly, she will soon abandon it, and she will only have wasted a little time. If, on the contrary, the system works well and can be used reliably, she may help her students considerably by allowing them to get language practice that would not otherwise be available to them, thus increasing their autonomy as language learners. Given her professional commitment to help her students, she may even consider that she is obliged to start using the CALL system.

The problematic case, which unfortunately is common, is the intermediate one. The teacher may have no way to determine whether the CALL system is reliable or not. If she incorrectly believes that an unreliable system is reliable, or that a system which now appears reliable will continue to be reliable, she may organise her teaching activities on this assumption, investing her scarce resources in developing teaching activities centred around the use of the system. If the system at a later date turns out no longer to be usable, she will have lost some of her initial investment. Should the system continue to work as expected for a long time, the teacher is likely to consider that she has gained overall from the experience. However, if the system works for long enough that she substantially changes her practices, but then ceases to work, she may lose heavily. The less certain the teacher is about how reliable the system will be over an extended period, the more likely she and her students are to suffer harm as a result of their interaction with the CALL system provider.

Now consider the situation from the point of view of the academic CALL system provider. As a member of the academic community, they may benefit if they can acquire data by carrying out an experiment with the teacher. Other things being equal, they will wish to do this. However, they are also establishing a cooperative enterprise with the teacher and her students centred around the use of the software. Since the academic is most likely approaching the teacher and attempting to persuade her to enter into this relationship, he is obliged to do this in a way that shows appropriate concern for any harm that might come to her as a result of her involvement. As described in the previous paragraph, an obvious way in which the teacher may come to harm is if the software is unreliable, and she is unaware of this. It follows that the academic has two important duties: first, to be able to make a good estimate of the software's reliability over the extended period where the teacher might reasonably be expecting to be have it available, and second, to inform the teacher clearly about the relevant facts. If the academic fails in these duties, they can reasonably be said to be treating the teacher and her students in an unethical manner, encouraging them to join a bad joint enterprise under the mistaken belief that it is a good one. In plain language, the academic is fraudulently exploiting the teacher for their personal gain.

4   OUR CALL GROUP'S EXPERIENCE

It's easy to write papers about how ethical a project is going to be. But walking the walk is another thing. Thus we find in our own small core group attitudes which directly contradict our own ethical basis. These include the notion expressed by one of the group that we need to 'motivate' users. This is absolutely incorrect. We can put 'motivate' in the same bucket as the morally unjustifiable 'gamify'. We may publicise our app, we may try to talk people into trying it, we may even be proud of it. But the

motivation for using it must lie in the functionality and/or content of the app and what that offers the prospective user. The ethical basis of the app may also come into this. It must be a transparent process in which the app either succeeds or doesn't because of its own inherent qualities and what they offer the user.

It is therefore with a sense of unease that we report an anecdote from the recent SLaTE 2019 workshop[19] when a senior researcher asked one of the authors 'Found any more victims?' An apt question for an author of a paper on vampire behaviour, it referred to our encouraging potential users of LARA to come to our expenses-paid workshop. At which point does offering the opportunity become inappropriate badgering?

An important point to keep in mind is that if one follows ethical principles, there are gains to be made. The less oppressive our advertising, the more likely we are to get appropriate attendees who are there because they really want to be. This has got to be best for the application.

4.1 Past ethical failures

From one of the EU workshops on RRI comes the observation that 'Many researchers make assumptions about the desirability and social acceptability of their research but impacts paradoxically are perceived as being too difficult to predict without knowing the context of use and application.'[20]

We'd like to make mention here of an application developed within the Geneva group some years ago, just before 'ethics' became such a noted track of Horizon 2020. In brief an app was developed for practising conversational English utilising speech recognition. As already observed, it is never enough to develop such a thing: in order to qualify as 'research' it needs to produce data. Claudia Baur, then a PhD student, developed the gamified app in close consultation with teachers in germanophone Switzerland. Various teachers agreed to get their pupils to use it. Tens of thousands of logged utterances then became the meat of the three Shared Task exercises carried out by a consortium including Geneva and several other universities[21] [22] [23]. Prior to that Baur presented the data to demonstrate that using her app created positive language learning results as a major part of her PhD [9].

The question is, was this data acquired in a way that was educationally useful for the teachers and students? Was it even 'benign'? It is hard to argue that it succeeded in this regard. The gamification aspect of it is dubious at best.

> An educational example of gamification is the design of learning courses where traditional activities, metrics, and assessment criteria are turned into game-like tasks and measures: assignments become "quests," grades become achievements and points, and students "level-up" when they progress in their learning (Landers, 2014). The main problem with this approach is that it seeks to exert influence by overriding or downplaying rationality and agency. Indeed, gamification can be understood as an aspect of a larger phenomenon where principles of behavior management, often supported by digital apps and games, and increasingly based on pseudo-neuroscientific principles, are used to "nudge" individuals toward prosocial outcomes or consumptive behaviors (Jones, Pykett, & Whitehead, 2013; Lupton & Thomas, 2015; O'Donnell, 2014). [6]

To this we might also add another ethical conundrum: is such a scenario exploiting school students (in this case) as unpaid labour? [10].

And like so many projects of this type, it was dropped when it suited the researchers. It still sits on the University of Geneva's website[24], nobody has ever since done any of the work necessary to make it a well-functioning tool for language learning, even though it had the potential to be one. A PhD was achieved, funding ended. Staff left, other staff changed their interests. How many times has this happened over the period of Horizon2020, one wonders. Various of the children who had been

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[19] https://sites.google.com/view/slate2019/home

[20] Insights and reflections from National Responsible Research and Innovation Stakeholder Workshops https://www.rri-practice.eu/wp-content/uploads/2017/09/Experiences-from-the-RRI-national-workshops-June-2017-final.pdf

[21] http://regulus.unige.ch/spokencallsharedtask/

[22] https://regulus.unige.ch/spokencallsharedtask_2ndedition/

[23] https://regulus.unige.ch/spokencallsharedtask_3rdedition/

[24] http://callslt.unige.ch/demos-and-resources/

induced into using it actually enjoyed doing so enough to wish that there was more content for it. But that never was done. Apart from a couple of small spinoff projects which were also soon abandoned [11, 12], the tool might just as well never have existed at all. It wasn't relevant to the people doing the research that children would be used or that they may have legitimate wants that would be ignored.

4.2 Present ethical plans

Over the past years, the notion of University Social Responsibility has become part of the conditions of how universities around the world operate. Now we are attempting to translate the ideal into action, with positive effect for a large community for whom interaction with technology is always precarious. LARA (Language and Reading Platform [13]) is an open collaborative project initiated Q3 2018. The intention is to create tools that let teachers easily create multimedia reading material to support beginner- and intermediate-level language learners. We outlined the ethical thinking behind LARA and its mother project CALLector in two earlier papers [2, 3]. The project's homepage gives examples, documentation and links to other papers[25].

Here we talk more about the practical problems of ensuring an ethical outcome. In Stephenie Meyer's phrase, we want CALL technology providers to be vegetarian vampires. But are we managing that? Why will anything good come out of a project which is subject to limited funding and the self-interest of a PhD student? How can we make this shaky premise ethically viable? Furthermore, if LARA was itself the end, it would not be acceptable as a research project. It has to be linked to research and that means data. For CALL, data means getting users to do things that create the data. Thus the pressure exists. It isn't enough to make LARA, to suppose that's a good thing, or even to accept the idea that it is universally popular and used. It has to be scientised, validated by data that demonstrates (or not) that LARA does have an impact.

There are obvious ethical issues involved in this sort of data collection where a control group is required. Setting aside those as being not relevant to our central concern here, ethical issues abound in so far as school students are concerned. How to get the teacher onside? Can this be done in an ethical way? Is it even worth trying since it is highly debatable if it will be possible to make meaningful comparisons?

At the same time there is a wider aspect of the ethics of this project. We believe we are developing an app which is a useful addition to the wide array of language learning technology extant. Setting aside financial and personal interests, as they pertain to the project, some of those involved are committed to the idea of this being sustainable in the long term. There are three aspects to this: ongoing technical expertise, content development and ethics. All of these feed into the creation of an online community. Our intent is that these will combine together to make LARA a permanent fixture in the language learning toolkit of the internet.

'Ethics by Design: A Manifesto' [14] details various principles are being important to good ethical design. They include the following points taken from the cited paper:

• Design to support the people who will be using the product or service by engendering empathy for users.

• Provide enough information for people to make informed decisions at every stage about whether, when, and how to use the product or service.

• Respect people's right to choose how they engage with the product or service; offer alternatives or customisation.

• Balance appropriate privacy and security with equitable access by as many systems and people as possible, globally.

• Support shared decision making and feedback.

• Aim for economically, environmentally, and socially sustainable designs.

• Integrate planning for how to handle failure, including transparency and reporting.

• Be realistic about what is possible and needed.

• Support the product or service throughout its lifespan.

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[25] https://www.unige.ch/callector/text-content/

It is obvious looking at this abbreviated list that ethical design runs the risk of becoming unmanageable. For example, 'economic', 'environmental' and 'social' are likely to conflict with each other. And we are particularly concerned about the last point. Lifespan is often in practice defined by support, end of life by lack of support, and is therefore inherently in contradiction with the notion of ethics.

5   A BETTER WAY: VEGETARIAN VAMPIRES

If the above may be taken as general guidelines, in the case of a specific project such as ours, we can adapt this list to suit our task and aims. We would like to add:

1   Long term sustainability. This is both the most important issue and the hardest one to address. There is a theory that paying money for what you use makes it sustainable. See for example, Sutori[26], which is one of many potential replacements for Storify. Unfortunately, however, paying does not preclude takeovers or closure even if the users paid enough to make it financially viable. We do not want to use the term 'forever'. But the best chance for a genuine long term future without fears for the users is to create a platform that is open source. Unfortunately, even when a project, like ours, is open source, there are always dependencies on third-party components whose status may change over time. But by planning realistically, it is usually possible to reduce the associated risks a great deal.

2   Because this is an open source project, the people who are most valuable long-term are those who are involved but unpaid. If one has a budget, as is the case with the platform we are building, one can always find paid labour if it is needed. But by definition the success of the project is in its users who are unpaid, whether their contribution is on the technical side, content development side, or simply being users. Without the human resource of people willing to be involved on trust, one will simply end up with another app that isn't used, perhaps a PhD, and a few papers to add to a few CVs. Users of every type must be made the centre of all development!

3   All software must be documented well enough that it is readily practicable for qualified people to maintain, extend and customise it. Open source permissions must make this legally as well as technically feasible.

4   The social network must not be tied to a single proprietary set of servers. Doing this gives control of the network to the people maintaining the servers; history suggests that they are then likely to abuse that power. Instead, we aim to arrange things so that it is easy for any group with a modicum of software skills to bring up their own servers, and host a part of the network which they control.

5   As much of the app's functionality as possible should be available to run without access to the internet. This is a convenience for some and a necessity for others who may not have internet access due to cost, reliability or censorship. In particular, it should be possible to retain at least some functionality if servers become temporarily or permanently unavailable.

6   Content-creators must unambiguously own their content. They must be free to remove it from the network at any time, if they no longer wish to make it available, and the content must then be fully deleted.

7   Users must be clearly informed about the nature of the data collected through the network, and it should be easy for them to opt out of having their data logged. Given the attractiveness to university researchers of being able to obtain large amounts of data, it is important to resist the temptation to bend the rules. In this we need to cater for the various levels of data collection. Teachers will want to collect data from their students' use of the application. Academics will want to collect or use data from teachers and/or from their students.

Some of these points and others are discussed in more detail in [3].

6   CONCLUSION

We appreciate the dis-ease with which some in the research world have reacted to the ideas of RRI. Ideally one has a toolkit of ethical guidelines and puts together what is relevant to one's project. In our

[26] https://www.sutori.com/blog/a-real-alternative-to-storify

case, our bottom line is an ethical base which will support the sustainability of the application and its community, the empowering of the users, and the empowering of the developers of code and content (who may also be users). If we are not able to do this, our project will have failed.

7   ACKNOWLEDGEMENTS

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