While graphic design as a profession is still relatively new, for most of its existence, practitioners have been criticised for their role in damaging the environment and society through the outputs they produce and the organisations for which they communicate. In 1964, Ken Garland’s *First Things First Manifesto* condemned an industry wasting talents on “trivial purposes, which contribute little or nothing to our national prosperity”. He proposed “a reversal of priorities” and challenged designers to stop congratulating themselves for work done to sell “slimming diets, fattening diets, deodorants, fizzy water, cigarettes, roll-ons, pull-ons and slip-ons” and focus more on “more useful and more lasting forms of communication” (1964, n.p.). Victor Papanek (1985, 68) also criticised the emphasis the industry placed on consumerism and proposed that 10 percent of a studio output be devoted to activities in contemporary social, environmental, financial, and ethical spheres.

This criticism has continued through to this millennium, with an updated *First Things First Manifesto* published in 1999, and with authors, such as David Berman (2009), who repeat Papanek’s 10 percent output proposal. This scrutiny has increased as the broader population realises that the current state of being is one of unsustainable growth—as indicated by numerous reports, from *Our Common Future* (1987) by the World Commission on Environment and Development to more recent reports, such *The State of the World* (2006) by the Worldwatch Institute.

This paper examines two design paradigms that attempt to address these criticisms—‘green design’ and ‘design futures’ (both of which will be defined below)—and how both have been relevant to my work as the creative director of graphic design studio, Liveworm. At this studio, which is embedded within the Queensland College of Art, Griffith University, commercial projects are undertaken within an environment modelled on a typical ‘industry’ studio; however, all work is completed by Bachelor of Design students who are majoring in Visual Communication Design. As Liveworm’s full-time creative director, I guide and advise students through each of the projects.

As I will discuss further in this paper, concepts and methods from the green-design paradigm have proven easy to implement within this environment, while adopting a design futures philosophy has been a far more complex undertaking. This process is best described as a continual ‘work-in-progress’; however, the effort required in moving towards adopting various design futures philosophies as a core model is essential in effectively addressing the criticisms levelled at graphic design.

The general response of graphic design practitioners and studios to the problem of wasteful and environment-damaging production methods has been to examine and alter these methods. Essentially, they have modified the production methods and technologies the studio communicates with. This shift in paradigm has commonly been referred to as ‘sustainable design’, ‘environmental design’, ‘environmentally conscious design’, ‘triple bottom line design’, ‘eco-friendly design’, and many other variations. For the purposes of this paper, it will be referred to as ‘green design’. Brian Dougherty explains the common understanding of green design as:

> … a matter of finding and using better physical materials. Designers may research things such as recycled and tree-free papers; or try to find nontoxic inks; or devise folds and structures that result in less waste. (2008, 10)

‘Design futures’ is an emerging design paradigm spearheaded by the work of design theorist Tony Fry. The design futures philosophy is based around the concept that current design practice is a problem in itself—instrumental in the ever-
expanding unsustainability of our society and therefore contributing to the rapid depletion of our environment. Fry (2012, 117) asserts that this practice of “defuturing” that design is party to is “a historically embedded process that has taken and is taking the future away”.

Many designers and studios have enthusiastically embraced ‘green design’ principles, and adopted new production methods, including using recycled paper stocks, and less harmful inks and glues. They have also engaged suppliers who have examined and altered their processes according to green-design principles. Clients have also contributed in their requests of designers—for example, they may specify that their publications be printed only on recycled paper.

This has coincided with a move away from printed material in favour of digital output as this is seen to be less harmful to the environment and society at large (even if there is some evidence that the energy required for online publication is actually greater; see Vinyard 2009). Specific areas of graphic design, such as packaging, have also undergone a transformation, with emphasis being placed on examining materials used as well as systems, storage, and transportability (Jedlicka 2009).

The rhetoric promoting green design to its practitioners is persuasive and best summarised by Susan Szenasy, Metropolis magazine’s editor-in-chief, in her speech to the American Institute of Graphic Arts’ National Conference in 2003. During this rallying cry, she proclaimed:

Designers today stand on the brink of being seen by society as essential contributors to its health, safety, and welfare. If you—together with the other design professions—decide to examine the materials and processes endemic to your work, as well as demand that these materials and processes become environmentally safe, you will be the heroes of the twenty-first century. (Szenasy 2003)

Powerful and emotive statements such as these have coincided with a large volume of green-design literature that typically includes clear and practical steps to producing green-design outcomes. Common in this literature are existing case studies that are aesthetically beautiful, expertly photographed, and well presented.
An excellent and much-celebrated demonstration of a green-design approach can be found in the *Clever Little Bag* packaging for Puma shoes (Shouraboura and Bertone 2011). This project was undertaken by the renowned design studio fuseproject, located in San Francisco.

The project saw a traditional Puma cardboard shoebox redesigned and replaced with a reusable canvas bag that featured a minimal and glue-free cardboard insert (Lehrer 2011). The project was not insubstantial; according to the fuseproject website, it involved twenty-one months of study, research, and development (fuseproject 2012). The website also provides the following information about the project:

Why is it so clever? By providing structure to a cardboard sheet, the bag uses 65% less cardboard than the standard shoe box, has no laminated printing, no tissue paper, takes up less space and weighs less in shipping, and replaces the plastic retail bag. (fuseproject 2012)

The new packaging is clever; it resulted in a reduced amount of waste and CO₂ emissions in production and shipping. The impact of the packaging in the sports-store context is also pronounced (figure 1); when grouped together on display, the bright red bags visually overpower all other shoe brands around them. This isn’t the only branding benefit gained from the project: the bag can be re-used after purchase, and the Puma website displays photos of enthusiastic customers showing their different uses for the bag post purchase.

According to Dougherty’s definition, this is a great green-design outcome—it has sought out an alternative material, the structure is considered, it creates less waste, and it can be re-used by the consumer after purchase. The design was also applauded by the design industry, winning numerous awards, including Yellow Pencil Winner, Packaging Design, Professional Awards 2011, D&AD; Winner, Innovation of the Year, 2011 Luxury Briefing Awards; Bronze Winner, Best Green New Product Innovation, 6th International Green Awards; Winner, Best of Show, The Dieline Awards 2011; Winner, Sustainability, Conde Nast Traveller 2011 Innovation and Design Awards; Winner, Packaging, Core77 Design Award 2011; and Winner, Graphics/Identity/Packaging, GOOD DESIGN Award 2011.

While fuseproject worked hard to apply green-design principles to the packaging, it is worth considering the production principles used for the shoes themselves. Interestingly, at the time that the *Clever Little Bag* was being launched, Puma was being critiqued in an investigation into environmental harm caused by factories in China—factories owned by suppliers that Puma engages to make some of its products, including shoes (Greenpeace, 2011). Specifically, the report targeted toxic wastewater produced in these factories, which was being discharged into the Yangtze and Pearl River Deltas.

Puma’s own *Environmental Profit and Loss Report* (Puma 2011, 8) measures the environmental impact of the organisation and its many suppliers across several areas, namely water use, greenhouse-gas emissions, land use, other air pollution, and waste. The report reveals that 57 percent of Puma’s environmental impact is attributed to the production of raw materials (cattle rearing, rubber plantations, cotton farming, petroleum production, and other material), 19 percent to the processing of these materials (outsole production, insole production, textile embroidery and cutting, adhesive and paint production, leather tanning, petroleum refining, cotton weaving, and dyeing), and 18 percent to the final manufacturing stages (shoe manufacturing, apparel manufacturing, accessory manufacturing) of these products.

Puma swiftly responded to the Greenpeace investigation with a pledge to incorporate Zero Discharge of Hazardous Chemicals (ZDHC) in its supply chain by 2020. According to its own report, Puma is also investigating the environmental sustainability of its materials with plans to ensure 50 percent of its products will be “made of more sustainable materials compared to the original material” by 2015 (Puma 2012, 39).

Undoubtedly, fuseproject succeeded in creating a far more environmentally friendly packaging solution for which they should be recognised. The project was also an important step in the process that Puma is undertaking towards its production methods. Nevertheless, it is interesting that the packaging of Puma’s
shoes was given precedence over the products themselves.

The creation of Puma’s environmentally friendly packaging to ship environmentally harmful products highlights a flaw in the application of green-design methods in that the scope is often too narrow. On balance, it seems that the exercise, using Michael Braungart and William McDonough’s (2009) terminology, has just made Puma “less bad”.

By contrast, design futures recognises that if design practice casts its frame of reference wider than that of green design—incorporating not only the environmental but also the social, cultural, economical, and political spheres—it has the potential to make massive contributions to correcting the current trajectory and instead contribute to the process of “futuring” our existence (Fry 2009).

Like green design, this approach considers how messages are being communicated; however, it is far more ambitious in that it also considers what is being communicated. A far more complex and fluid paradigm, design futures, unlike green design, does not have a fixed ‘road map’ or easy one-sentence summary to follow. There are also few existing case studies.

Of particular interest to the field of graphic design is Fry’s exploration of the concept of “recoding” and the opportunity it creates for graphic design studios to “devalue people’s investment in systems, products, services and lifestyles that defuture, while at the same time, generating new ambitions and material desires bonded to life-affirming futures”. In a slightly more succinct form, Fry states that the practice of recoding has two purposes: “the exposure of the unsustainable” and “the declaration of means of sustainment” (Fry 2009, 82).

Another relevant theory is what Fry terms “platforming”—a strategy whereby a “platform of change” is established within an existing organisation (2009, 126). The aim of the platform is to create a sustainable form of the original organisation within which it can grow until it eventually replaces the existing structure.
For design studios (such as Liveworm), this methodology is an ideal one with which to enable a smoother transition to an alternative model.

If the Clever Little Bag is an ideal green-design example, the Blackspot sneaker project by the non-profit organisation Adbusters Media Foundation (figure 2) is the equivalent design futures model. The latter differs from the former in that a creative team did not work within a limited scope in response to a client brief, but developed their own brief, defined their own scope, and created their own product (“The Blackspot Sneaker” 2004). Adbusters was able to create a product that considers the environment and society as well a system that can be freely copied and proliferated further.

On first glance, the Blackspot is just like any other casual street-styled sneaker, and shares strong aesthetic links to the classic Converse Chuck Taylor All Star model. But, unlike many contemporary shoe manufacturers, Adbusters took many more factors into consideration to ensure that all production aspects are aligned with the highest environmental and ethical standards. Following an approach very much like green design, each shoe is constructed using recycled tires, hemp, and artificial, vegan-approved leather (Arevalo 2005). However, the approach does not start and end with the materials—the shoes are manufactured in a Fair Trade factory.

These sneakers have to be ordered directly from Adbusters or purchased from independent (typically, socially conscious and vegan-specific) retailers. This separation from the typical sneaker store is important as the consumer is made overtly aware that these shoes are not classified as just another shoe within a wider selection, and, as consumers, they know they have made an intentional choice. Thus, using Fry’s definition of recoding, the act of purchasing the shoes contributes to the exposure of the unsustainable alternatives—the consumer cannot buy the product without knowing there is something very different about it.

The Adbusters website states, “Our hope is that people with similar philosophies will be inspired by our experiment in grassroots capitalism and start their own business ventures...” (Adbusters 2012). The shoe acts as a declaration of what ‘sustainable’ entails, as each pair comes with information from Adbusters about their production methods and refers consumers to other campaigns they are part of.
While the paradigm shift towards green design is a positive step, the design industry has put far less emphasis on what it communicates through the work undertaken for a client’s project. Within a design-studio service-provider model, the message is always pre-determined and provided by the client through their project brief, and the role of the designer is to effectively communicate the client’s message.

This arrangement may lead to a socially and/or environmentally positive outcome if the client and the brief are positioned in such a way; however, this philosophy does not assist in the instance of a studio engaged by clients who contribute towards ecological or social destruction. Following this level of green-design rhetoric, if a design studio was asked to produce a publication for a coal-mining organisation, the answer would be to publish the document online or print it on recycled paper and ignore what is being communicated and by whom, choosing to only focus on how.

The difference in the examples of fuseproject and Adbusters is clear; Adbusters was able to consider the issue in a far wider paradigm than the restricted framework and scope imposed on fuseproject. The result is also clearly different; the Adbusters project created a green (and socially responsible) system and product while fuseproject was only able to create green packaging. When the additional benefits in the social, cultural, economical, and political spheres are taken into account, the deficiencies in a green-design approach become even clearer.

Alistair Fuad-Luke (2009, 49) notes that “significant shifts in individual and collective behaviour are required in combination with eco-effective design” to begin to address the various crises facing humankind. Other writers in the field, such as Fry (2009), agree, and also champion that this kind of paradigm shift is urgently required rather than just focusing on the way in which something is manufactured and the materials used to do so.

The green-design concept is easily understood and the changes involved are not difficult to implement. For design practitioners and studios, it’s clear to see how adopting the green-design paradigm into their practice can be seen as the best way to ‘do their bit’.

In Liveworm, incorporating the ethos of green design has been a straightforward process. A decision was made that paper stocks with high environmental standards should used...
Figure 5 Consume magazine 2011, internal spread by Jessica Wong, Liveworm (David Sargent, Creative Director)
whenever possible; metallic foil stamps would be avoided; and print quantities examined and reduced if warranted. Our supply chain was also investigated, with the studio assessing print suppliers on not only price and quality but also their procedures, and client websites were shifted to webhosts that use green-energy-powered servers. The studio also investigated the amount of paper off-cuts when using an offset printing press and discovered that by using a page size just smaller than the ISO standard A4 portrait (16.8cm x 24cm), more pages per sheet could be produced, reducing the amount of paper wasted when trimmed. This is now used whenever possible and actively promoted as a cost-effective option to clients.

These methods quickly and easily became the default option and are often discussed with clients at the early stages of projects. However, incorporating design futures concepts has been far more challenging and complex. Where green design has firmer parameters, guidelines, and precedents, the philosophy of design futures is fluid, far-reaching, and still evolving. It also contains an element of the ‘unknown’, requiring those involved to “take risks, to venture out from one’s place of security”, as proclaimed by Fry (2000, n.p.).

My implementation of design futures in relation to Liveworm can be summarised as follows: projects and clients need to be critically examined; those with agendas that can be identified as harmful to the environment or society at large need to be replaced with more compatible clients and projects; and students within the studio need to be exposed to experiences and concepts outside of the current service-provider model.

Developing a platform of change within the studio has been the first important step. The platform was based on the simple premise that the studio would undertake projects for actively socially and environmentally responsible clients using the existing client base as a financial ‘safety net’. The platform started small, with the view of adhering to Papanek’s suggestion of devoting 10 percent of studio time to projects directed at contemporary social, environmental, financial, and ethical spheres. However, as the studio promoted finished projects through its website (which has been identified as the key interface for prospective clients), it attracted many more like-minded clients and projects. This has seen the amount of projects grow beyond that initial 10 percent—and continue to grow. The platform appears to be heading towards even more growth in the future.

A typical concern in undertaking projects for non-commercial clients is the level of financial remuneration involved. In terms of the projects Liveworm has completed to date, it has been discovered that many projects arrive with limited or no financial remuneration to offer. Nevertheless, a surprising amount of new clients have approached the studio with projects that have on-par funding with traditional commercial projects.

Figures 3 to 7 display a range of the project outcomes undertaken with this model. The Rainbow Bridge branding project (figure 3) was undertaken for Queensland Association for Healthy Communities. This initiative was aimed at providing crucial information to newly arrived or visiting lesbian, gay, bisexual, and transgender people in Queensland. Due to a majority of the funding for this organisation being cut (Sheldrick 2012), the initiative found itself with very little funding remaining to complete the project. Due to the platforming model, Liveworm was able to take on this project at a reduced fee.

The publication design for Walking the Path to Recovery (figure 4) was undertaken for the Yeronga Community Centre. This project was completed pro bono by Liveworm in exchange for being listed as a supporter of the centre.

Eating Disorders Queensland commissioned Liveworm to design the first issue of their Consume magazine (figures 5 and 6). The magazine delivered information on a range of contemporary youth issues (such as eating disorders, the environment, body image, sexuality, and religion) to high school-students throughout Queensland. This project had an adequate level of funding for our services; however, due to the importance of the messages promoted within the magazine, it was decided that the studio would provide work above and beyond the amount of hours charged to ensure the outcome was the best it could be.

An intriguing side effect of this new range of clients and projects has been the effect on student
designers. I have observed positive reactions from them that suggest that, because these projects have a greater inherent ‘meaning’ and are aimed at ‘doing good’, students enjoy working on them more than other projects and strive to do their best work on them. Earlier case-study-based (Stake 1995) interview research with students provides data that confirms this type of behaviour, as well as indicates that the enthusiasm and passion of the clients involved is another contributing factor to students’ work. Gathering more data from a wider range of students is the focus of future case-study-based research I plan to undertake.

Looking at these two paradigms and their influence on the studio, it is clear that both green design and design futures are essential ideologies to incorporate into practice. Adopting green-design methods has been an easy step for the studio to make; however, as discussed, adopting this approach alone is insufficient in the face of criticism now being levelled at the graphic design industry. As Fuad-Luke attests, a green-design approach needs to be combined with further behaviour change and the promotion of this change.

Could a recoding project such as the Blackspot sneaker be something Liveworm may be able to undertake in the future? The projects and strategies that the studio has so far undertaken are a modest start towards this goal and have only scratched the surface of the multiple concepts and ideas found within the design futures philosophy. One certainty, however, is that these first few steps have been important and the trajectory the studio is now heading along is an imperative one.

REFERENCES